The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 650.---Vol. XVIII. LONDON, SATURDAY, FEBRUARY 5, 1848. [Price 6d.

Stannaries of Cornwall—In the Vice-Warden's Court.

HILL *v.* VIGURS,

IN THE MATTER OF THE ROYAL POLBEROU MINES, OTHERWISE THE ST. AGNES CONSOLIDATED MINES.

WHEREAS the VICE-WARDEN did, by an ORDER, or DECREE, made in the above-mentioned cause, and bearing date on the 26th day of August, 1846, Order and Decree that a SALE be made of the ORES and HALVANS, and (if necessary) the ENGINES, MACHINERY, MATERIALS, and EFFECTS upon and belonging to the ROYAL POLBEROU MINES, otherwise the ST. AGNES CONSOLIDATED MINES, in the parish of ST. AGNES, within the said Stannaries, under the direction of the Registrar of the Court, and that the proceeds of such sale should be applied by the said Registrar in the manner directed by the said Order or Decree,

Notice is hereby given, that, pursuant to the said Order and Decree, a PUBLIC AUCTION will be HOLDEN at the ROYAL POLBEROU MINES, otherwise the ST. AGNES CONSOLIDATED MINES aforesaid, on Tuesday, the 15th day of February next, and following days, at Eleven o'clock in the forenoon of each day, for SELLING, either together or in lots, the under-mentioned

MINING MACHINERY AND MATERIALS—viz.:

SIX STEAM-ENGINES—

1 80-inch cylinder PUMPING ENGINE, 9 feet stroke, with three boilers, about 36 tons, the first piece of rod, and iron balance bob.
1 60-inch cylinder PUMPING ENGINE, 8 feet stroke, with three boilers, about 33 tons, two balance-bobs, and the first piece of rod.
1 36-inch cylinder DOUBLE-ACTING STAMPING ENGINE, 10½ feet stroke, and three boilers, about 35 tons, two fly-wheels, about 30 feet in diameter, with wrought-iron arms and sweep-rod, for working 96-heads, wrought-iron lifters, 6 cast-iron and 2 oak axles, and 24 oak frames.
1 22-inch cylinder WHIM-ENGINE, with two boilers, about 12 tons.
1 18-inch cylinder WHIM-ENGINE, with two boilers, about 16 tons.
1 16-inch cylinder WHIM-ENGINE, with one boiler, about 8 tons.

The whole of the above Engines have Brass Air-Pumps and Buckets.

A SAW-MILL, with water-wheel, 28 feet in diameter, and 20 inches breast, cast-iron fly-wheels, and oak axles and frames.

5 Capstans and shears; about 700 fms. of capstan and cat-head ropes, from 16½ inches and under; 1800 fathoms of whim-ropes and chairs, of various sizes; 230 fms. of wire rope; 6 horse-whims; about 300 fathoms of PUMPS, of the following dimensions—viz.: 18, 14, 13, 12, 9, and 8 inches diameter; with plunger-poles, windbores, working barrels, H and top doorpieces, clack seatpieces, and brass buckets, plunger-pole cases, stuffing-boxes and glands, several hundred fathoms of ladders, 33 tram-waggons, 118 fathoms of 15-inch new oak rods, several hundred fathoms of flat and connection-rods, of various sizes, 600 fathoms of launders, about 2300 fathoms of tramroad iron, machine, horse, and winze kibbles, water barrels, a large quantity of stands and pulleys, wheel and hand-barrows, ore hutches, buddles, frames, and trunks, miners' chests, about 4 tons of old brass, several bundles of steel, 25 tons of NEW IRON, staples and glands, strapping-plates, of various lengths and sizes, boiler and kibble plates, stamps-heads and lifters, air-pipes, pulley blocks, iron and wood axles, weighing machine, 6 beams and scales, steelyards, brass and iron weights, new and old shovels, riddles, pick and shovel hilts, sheet-lead, white-lead, safety fuse, engine-shag, gunpowder, candles, brass clacks, seats, and rings, ditto bearings, ditto valves, ditto poles, of 3½ and 2¼-inch diameter, ditto air-pumps and buckets; 6 smiths' bellows, of the following dimensions—viz., 1 42-inch, 1 40-inch, and 4 36-inch; 5 anvils, 3 vices, smith's crane, punching engine, screwing stocks, taps, and plates, mandril, boring machine, a large quantity of smiths' and miners' tools, 2 grinding-stones, carpenters' benches, several tons of old wrought and cast-iron, a large quantity of old timber, old ropes, dials and stand, and a great variety of other materials in general use in mines. Also, FOUR CART HORSES and HARNESS, 4 carts and wheels, chaffing machine, and the whole of the ACCOUNT-HOUSE FURNITURE.

For viewing the same, application may be made to Capt. Evans, of St. Agnes; or Mr. Morriss, at the mines; and for further particulars (if by letter, pre-paid) to Messrs. Grylls and Hill, solicitors, Helston; or to Messrs. Hodge and Hockin, solicitors, Truro.

Dated Registrar's Office, Truro, the 12th day of January, 1848.

HARROWBARROW OLD MINE, CALSTOCK.—SALE, BY AUCTION, OF VALUABLE MINE MATERIALS,

Without reserve, for which payment will be received in approved bills, at 3 months' date.

TO BE SOLD, BY PUBLIC AUCTION, by GEO. CARNE, at HARROWBARROW OLD MINE, in the parish of CALSTOCK, on Tuesday, the 15th of February, at Eleven o'clock in the forenoon precisely, the whole of the valuable

MACHINERY AND PLANT:

Comprising excellent capstan and capstan rope, about 100 fathoms; shears, pulleys, and sheaves; 2 horse-whims, whim-ropes, poppet-heads and stands, water and cog-wheels, rollers and belts for machine for cleaning tin, 2 balance-bobs, stands, and bearings, main rods, strapping plates and bolts, about 50 fathoms of 9-inch pumps, with windbore, working barrel, H-piece, clack door, and seating, complete, plunger-poles, small shears and triangle, 2 pairs (one brass) of double-purchase blocks, large wrench and rope, several cleansing racks and troughs, 30 fathoms zinc pipe, several tons of useful iron and steel, 2 beams and scales (one very large), about 20 cwts. weights, weighing stand, large bell and pulley, adapted for a factory, quantities of friction-wheels and brasses, yokes and glands, ladders, kibbles, hand and wheelbarrows, spare rope, Norway and American timber, oil, grease, paint, safety fuze, nails, grates, shovels, lanthorns, miners' tools, ore barrels, tar, leather, lead, kibbles, chain of various sizes, &c. &c. &c.; the FITTINGS of SMITH'S SHOP—complete set of taps and screw-plates, 2 pairs large bellows, 2 anvils, 2 vices, trough, horse, and a large variety of tools and useful articles. In CARPENTER'S SHOP—benches, cross-cut saw, miners' and tool chests, grindstones, vats and sieves, rails, &c.; together with the STAMP-AXLE, STAMPS, &c. Also, about FIFTY TONS of TINSTUFF, now lying on the floors, and a variety of useful effects.

The whole of the above valuable property is, for mining purposes, as good as new, having been but little used, and well deserves the attention of captains and agents of mines. The mine is about 2½ miles from the Tamar—is nearly adjoining the mail road from Cornwall to Devonshire—thus affording great facilities for the removal of heavy pieces of machinery.

Full particulars may be known on application to Mr. George Carne, 20, George-street, Plymouth.—The machinery may be viewed three days (Sunday excepted) before the sale, or any previous day, by appointment with Capt. Cook, at the mine.

Catalogues seven days before the sale, on application at the mine; or at 20, George-street, Plymouth.

N.B.—The engine has been disposed of by private contract, but the stamping machinery will be sold as above.

All PERSONS having any CLAIM on the ADVENTURERS, are requested to send the particulars of their accounts to the auctioneer.

Dated George-street, Plymouth, Jan. 22, 1848.

WHEAL GRAY, in the parish of GERMOE (about six miles from Hayle).—FOR SALE, BY PUBLIC AUCTION, on Tuesday, the 15th day of February, 1848, about THREE HUNDRED LOTS of NEW and SECOND-HAND TIMBER, well adapted for house-building and mining purposes.

The Sale will commence precisely at Ten o'clock in the forenoon.

Also, FOR SALE, BY PRIVATE CONTRACT, AT WHEAL GRAY,

1 53-inch cylinder PUMPING-ENGINE, 9 feet by 7 feet stroke.
3 Excellent BOILERS (about 40 tons, nearly new).
1 40-inch cylinder PUMPING ENGINE, 9 feet by 7 feet stroke, with one boiler.
1 18-inch (double) STAMPING-ENGINE, 4 feet stroke, with fly-wheel, complete, and well adapted for winding-engine.
3 Nearly new, CAST-IRON AXLES, lifting five times on the round, for 12-heads.
3 Capstans and 3 shears, complete; 100 fathoms 9-inch capstan rope, 3 balance-bobs, with iron-work, complete.
3 Angle-bobs, 1 cast-iron beam, H-pieces, doorpieces, working barrels, windbores, and pumps, varying in size from 16-inch to 6-inch bore.

The engines and pitwork are in excellent condition—the water in the mine being drunk in preference to other water in the locality, after being pumped to surface by the engine.

A large quantity of slime frames, buddles, and sheds; also, two excellent "Brunton's" Patent Frames, as well as the wood-house which contains them.

Two smiths' bellows, anvils, vices, smiths' and miners' tools, tramroad iron, new and old iron, of various sizes.

Large assortment of faggotted and common iron strapping plates.

Ten horse-whims, 10-feet cage, in good condition; about 1000 fathoms of horse-whim chain, 20 horse-whim kibbles, screwing tools, punching-engine, pick and shovel hilts, and various other articles, worthy the notice of mine agents.

For particulars, apply to the agent on the mine; or Capt. Thos. Richards, Marazion.

VALUABLE PUMPING AND WINDING ENGINES FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, at WHEAL VOR MINE, in the parish of BREAGE, CORNWALL—

1 80-inch DRAUGHT ENGINE, 10-feet stroke in cylinder, and 8 feet in shaft, main beam and caps, top nozzle, spring piston and rod—all new this year; with four boilers, of 12 tons each, in excellent repair.
1 80-inch DITTO, 10 feet stroke in cylinder, 7½ feet in shaft, cylinder, piston, bottom and cover, nearly new, with two boilers, of 12 tons each, and three boilers, of 10 tons each, all lately thoroughly repaired.
1 40-inch DITTO, 9 feet stroke in cylinder, and 7 feet in shaft, without boilers.
1 20-inch WINDING ENGINE, 5 feet stroke, with two boilers, of 4 and 6 tons, and vertical cage, all in complete repair—the boilers and some other parts nearly new.
1 18-inch DITTO, 4 ft. stroke, with one boiler, of 5 tons, and horizontal cage, complete.
Several TONS of straight and turned STEAM-PIPES.
12-head CAST-IRON STAMPS AXLES, with bearings, oak frames, &c., complete.
A powerful WEIGHING MACHINE, nearly new, comprising every requisite.
An immense number of PUMPS, matching-pieces and windbores, 12 to 17-inch bore, with working barrels, doorpieces, H-pieces, cases, with stuffing-boxes and glands to match, from 11 to 19 inches bore, and plunger-poles, from 12 to 19 diameter.
Faggotted rod and cap plates, 6, 7, and 8 inches wide, staples and glands, eyerunners, caps, saddles, troughs and gudgeons for balance and other bobs.

Application to be made to Capt. R. Blight, jun., on the mine.

Dated Nov. 29, 1847.

N.B.—The above are of easy transit to Hayle wharfs, and from thence on ship-board, if required.

VALUABLE AND EXTENSIVE COLLIERIES, MACHINERY, COLLIERY PLANT, FARM, and LANDS, near ST. HELENS.—TO BE SOLD, BY PRIVATE TREATY, in consequence of the death of the surviving partner in the firm of Speakman, Caldwell, and Co., all those old-established and well-known COLLIERIES, called the GERARD'S BRIDGE, COWLEY HILL, and LITTLE COWLEY HILL COLLIERIES, comprising the following SEAMS of COAL—namely:

THE LITTLE MINE, or HIGHER DELF.
THE RAVENHEAD MAIN DELF.
THE ST. SEBASTIAN MINE.
THE SIR JOHN MINE.
THE FLAGGY DELF.
THE RUSHY PARK DELF—and
THE LITTLE MINE, or YARD MINE.

The above-mentioned collieries are in full operation, and in good working order, producing, at present, upwards of 100,000 tons per annum, and are held under leases from various parties, and for various terms—subject to the payment of annual rents and periodical admeasurements. The quantity of coal remaining ungotten, is estimated at about 1,000,000 of tons, which are laid dry by the present winnings.

The capabilities and operations of the concern may be very considerably extended, by a moderate outlay of capital, in a new opening on the deep of the present levels.

The machinery and general working stock are in a very efficient state, and will be sold with the mines.

The collieries are situate on the banks of the Sankey Canal, and have a branch railway from the mouths of all the pits, communicating with the St. Helens and Raincorn Gap Railway. They have been established for a period of upwards of 30 years, and enjoy an old and valuable connection amongst the glass, alkali, and other manufactories, in the immediate locality, and also in the salt districts of Cheshire, besides an extensive steam and export trade at the port of Liverpool.

There is attached to the collieries a FREEHOLD FARM, known as LITTLE COWLEY HILL ESTATE, containing 21 statute acres (very eligibly situate for building purposes), with a good HOUSE and suitable OUTBUILDINGS, now occupied by Mr. Henry Taylor, agent of the colliery, and may either be taken by the purchaser of the collieries, or the trustees will dispose of it separately.

Further information may be obtained on reference to J. LANGSHAW, Esq., of the Hollins, near Bolton-le-Moors; Mr. John Mercer, colliery surveyor, St. Helens, at whose office plans of the workings are kept, and may be inspected; or for full particulars, and to view the property, to Mr. Taylor, agent, on the premises; C. M. Robinson, Esq., solicitor, Wellington, Salop; or to J. Ansdell, Esq., solicitor, St. Helens.

January, 1848.

TO BE SOLD, BY PRIVATE CONTRACT, the SETT and MATERIALS of EAST RELISTIAN MINE, situate in the parish of GWINEAR, in the county of CORNWALL.—This mine is suspended, in consequence of the pecuniary difficulties of some of the chief shareholders, whilst its prospects were never so encouraging. Copper ores, to a considerable amount, have already been risen, and the mine appears increasingly productive as it is being wrought in depth.

The speculation offers an excellent opportunity to a company who can raise but a small capital, as the workings may at once be prosecuted to a great extent on ore ground already developed, and without the aid of any additional materials. The engine is of 30-inch cylinder, and, together with the pitwork, is nearly new.

Application to be made to Capt. John Lenten, the manager, Poole, near Redruth; or to Mr. J. D. Vivian, the purser, Roseworthy, near Camborne.

TO BE SOLD, BY PRIVATE TREATY, FOUR (32nds) SHARES (the whole into 32 shares, being divided) in that well-known and long-established LEAD MINE, now in full operation, called the HOLYWELL LEVEL MINE, situate near the town of Holywell, in the county of Flint. A powerful steam-engine stands on the mine, and an excellent level, for unwatering the land, has been driven a long distance, and altogether the mine is worked on a large scale. A valuable discovery has recently been made, and which, when fully worked, must yield a large quantity of ore, and prove a source of great profit. The company carrying on the mine is a highly respectable one. Satisfactory reasons given for the disposal of the present shares.

For all further particulars, address "W. W.," care of the Editor of the *Mining Journal*, 26, Fleet-street, London.

N.B.—The Holywell Level Mine yielded large quantities of ore for several years, with corresponding advantage to the proprietors, and it is now considered one of the "leading adventures" of the county of Flint.

IMPORTANT MINING SHARES FOR SALE.—Captain JOHN SPARGO announces to his friends, and mining adventurers generally, that he is instructed to SELL SHARES in the following MINES—the qualities and prospects of which are well known to him, from his having superintended the operations therein for many months—and, in some instances, for years.

The peculiar advantages to be obtained in the present instance is, that the whole of the purchase-money is to be paid into the funds of the different mines, for the purpose of providing the necessary capital for putting them into full operation; Capt. Spargo, therefore, highly recommends these mines, as affording an opportunity of purchasing on most liberal terms.

NORTH WHEAL FRIENDSHIP—TIN MINE.

200 (1024ths) shares, at £3 per share.

This mine is in a position to *ensure dividends*, as soon as the necessary machinery is erected. A large pile of tin, of excellent quality, is now at grass: excellent stones of tin can be broken at the present level; and I can undertake that returns can be made before one-half the sum intended to be provided by the sale of the above shares is expended.

The mine can be worked by water-power.

GREAT WHEAL FREDERICK—TIN MINE.

500 (2048ths) shares, at £2 per share.

This mine is well known as having formerly returned large quantities of tin above the adit level. During the last two years I have superintended the operations. Large bunches of tin are gone down in the different adits, and nothing is now required but to erect machinery and sink upon the lodes. The mine is capable of being worked by water-power. I estimate the cost of erecting machinery and sinking for deeper levels at about £300, and I have no doubt of making ample dividends in a very short period.

WHEAL SAMSON—GOLD, SILVER, AND COPPER MINE

200 (2048ths) shares for sale.

The extraordinary quality of the ore in this mine justifies the most sanguine expectations. Many hundred pounds' worth of silver ore has been returned by a few miners from the branches of the lode. Samples have been broken by the present proprietor, worth, at least, £150 per ton. The main lode has now been discovered, and driven upon between 40 and 50 fathoms, at about 15 fathoms from the surface. Levels can be taken up on the course of the lode from the sea-shore, giving backs of from 60 to 70 fathoms, and there is every assurance of a large course of ore. I consider that from £600 to £800 would do all that is necessary in this mine, and that it is one of the most extraordinary speculations in the county. Shares in this mine have been sold for £20, but the above number of shares will be sold at a very low price, and the whole amount applied to working the mine.

Captain SPARGO is also instructed to SELL a FEW SHARES in the

EAST ALVENNEY MINE.

This mine is now working—the whole of the necessary machinery is erected: a shaft is sunk on the course of the lode. The quality of the tin is the finest that can be produced in Cornwall. The adventurers are now about to commence stoping on a rich course of tin, and there is no doubt but the mine is now on the eve of paying ample dividends.

ALSO, AN ENTIRE TIN SETT.

This tin mine is of great promise. The whole sett will be disposed of at a moderate price.

Applications for shares in these mines to be made to Capt. JOHN SPARGO, Down Gate, Stoke Climsland, near Callington, Cornwall; or to Mr. James Lane, 75, Old Broad-street, London, at whose offices plans and specimens may be seen.

TAVY CONSOLS EAST COPPER MINE.

In 512 shares.

WORKED ON THE COST-BOOK SYSTEM.

PROSPECTUS.

A sett having been obtained from the proprietor of Upton, or Tippeton, estate, the grantees are desirous of forming a company, to the extent of the shares above-mentioned.

The sett will be held for a term of 21 years, at a royalty of 1-14th before all the outlay on the mine is paid, and 1-12th afterwards.

The estate is situated in the parish of Buckland Monachorum, in the county of Devon, in the midst of a mineral district—being a short distance from the following mines—viz.: Plymouth Wheal Yeoland, Franco, the Virtuous Lady, and Tavy Consols; and is directly east of the last-named—one of the most promising in the neighbourhood; and, from the reports of various captains, and several other parties of experience and judgment, the mine can be well recommended as a good speculation.

The ground has been inspected by Captains Edwards, Carpenter, and Heath, and pronounced by them as possessing all the requisites for the successful working of the mine.

The shares will be divided into 512, and the amount per share £1—out of which, 5s. per share will be taken for the first working of the mine, to prevent the necessity for an immediate call.

Applications for shares to be made to Messrs. Croker, Clement, and Co., brokers, auctioneers, and general commission agents, 33, Whimple-street, Plymouth, where all further particulars may be obtained.

FREDERICK WILLIAM CROKER, Purser, pro tem.

Professional Life Assurance Office, 33, Whimple-street, Plymouth, Jan. 26, 1848.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £3 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.

DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

TO MINE CAPTAINS.—WANTED, a Person of experience, to undertake the duties of RESIDENT MANAGER of LEAD MINES, in NORTH WALES.—Satisfactory information will be required as to the qualifications of the applicant, and where he has been engaged.—Address, stating expected salary, to "R. R.," care of Messrs. Good, stationers, Moorgate-street, London.

TO SHIPOWNERS AND CAPTAINS.—CAMERON'S STEAM-COAL COMPANY are ready to CHARTER VESSELS at per ton, register O. M., per month or year, to carry each of from 150 to 300 tons of coal. They must sail well, take the ground, shift without ballast, and be of an easy draught of water.

Sealed tenders to be transmitted to the secretary, at the company's offices here, by the 9th February inst., stating full particulars, draught of water, &c.

A. C. HOWDEN, Secretary.

Company's Offices, 2, Moorgate-street, London, Feb. 1, 1848.

TO DIRECTORS AND SHAREHOLDERS IN MINES.—ASSAYS and ANALYSES of all MINERAL PRODUCTS carefully PREPARED by Messrs. REYLIN and CHEESMAN, Analytical Chemists, &c., No. 30, Myrtle-street, Queen's-road, Dalston.

TO MINE AND COLLIERY COMPANIES AND PROPRIETORS.—TWO SURVEYORS, thoroughly competent, are desirous of undertaking the SURVEYS of MINES and COLLIERIES, on terms advantageous to those who may have occasion for their services.—SALES or PURCHASES of SHARES in the above attended to with promptness and punctuality, on the usual commission.

3, Cannon-row, Westminster. DE WINTON & BONE, Surveyors.

LAND DRAINAGE.—Mr. W. HUGHES, Civil Engineer, begs to announce, that he undertakes the INSPECTION of ESTATES to be DRAINED, the SETTING OUT of DRAINS, the RECLAMATION of LAND, and the GENERAL SUPERINTENDENCE of WORK, at a FIXED CHARGE PER ACRE, according to the extent of land.—Full particulars may be had on application to Mr. W. Hughes, C.E., at the office of the *Mining Journal*, 26, Fleet-street, London.

MR. JAMES STRIDE, PARLIAMENTARY AGENT, begs to announce, that he has COMMENCED BUSINESS as MINING, ESTATE, SHARE, and GENERAL AGENT. He has ON SALE, SHARES in the best DIVIDEND-PAYING and other MINES. The earliest and most authentic information, and the full benefit of the market value, afforded to buyers and sellers of mining and other property.

MINES INSPECTED AND REPORTED ON.

35, Charing-cross, London.

MR. RYE is a BUYER in SOUTH WHEAL FRANCIS and TREVISKEY AND BARRIER MINES; and has SETTS to DISPOSE OF, contiguous to some of the best mines in Cornwall.

Mining Office, 86, Old Broad-street.

MR. R. TREDINNICK, THREE KING'S COURT, *LOMBARD-STREET, LONDON,*

Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously upon personal application.—MONEY ADVANCED upon the above securities.

JAMES LANE, MINING SHARE DEALER, 75, *OLD BROAD-STREET, LONDON.*

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

MONEY.—MESSRS. KILLICK & CO. (late Winstanley, Killick, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.

6, Bank Chambers, opposite the Bank of England.

CHIANTLA MINING COMPANY.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the office, 2, Duke-street, Adelphi, London, on Thursday, the 10th day of February inst., for the purpose of receiving a report from the directors, and of considering the expediency of, and determining upon, the dissolution of the company, or of taking such other steps as may be deemed advisable.

London, Feb. 1, 1848.

OFFICE OF THE GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND, Castle Baynard, 13, Upper Thames-street, London, Feb. 1, 1848.—The HOLDERS of DEBENTURES of this company are requested to MEET at this office on SATURDAY, the 12th inst., at Two o'clock precisely.

By order of the Court of Assistants,

E. YOUNGER, Secretary, pro tem.

OFFICE OF THE GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND, Castle Baynard, 13, Upper Thames-street, London, Jan. 25, 1848.—The Court of Assistants of the GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND hereby give Notice, that a SPECIAL GENERAL COURT will be HELD at Radley's Hotel, New Bridge-street, Blackfriars, on Friday, the 11th of February next, at Two o'clock precisely.

By order of the Court of Assistants,

E. YOUNGER, Secretary, pro tem.

N.B.—Such holders of scrip certificates of preference shares, as desire to vote at the special general court of the 11th of February, are required to register their shares on or before Tuesday, the 8th day of February next.

PATENT GALVANISED IRON COMPANY—TRADING under the FIRM of "MALINS & RAWLINSONS."

Notice is hereby given, that the directors have this day made a further CALL of TWO POUNDS per share upon the respective owners of the NEW SHARES, authorised to be created by the resolution of the special general meeting of the above company of the 28th of October, 1845—the said call to be PAYABLE on the 19th day of February inst.; and the shareholders are requested to pay the same into the bank of Messrs. Prescott, Grote, and Co., of 62, Threadneedle-street, London. By order,

3, Mansion-house-place, London, Feb. 1, 1848. S. VINCENT, Secretary.

TINCROFT MINING COMPANY.—Notice is hereby given, that a GENERAL MEETING of the shareholders in this company will be HELD at this office on Thursday, the 17th day of February next, at Two o'clock precisely.

44, Finsbury-square, London, Jan. 20, 1848.

WHEAL BARBARA MINING COMPANY.—Notice is hereby given, that the AFFAIRS of the COMPANY will be henceforth CONDUCTED at the OFFICES, 4, STAMP-OFFICE BUILDINGS, MANCHESTER, in pursuance of the resolutions passed at the special general meeting of adventurers, held, pursuant to notice, on the 7th January, 1848, where all communications are requested to be addressed, and information can be acquired. WM. SHEARMAN, Purser.

WHEAL BARBARA MINE—NOTICE.—That all OUTSTANDING SCRIP BE SENT into the BRITISH MINING OFFICES, No. 4, Stamp-office Buildings, Manchester, on or before the 1st of March, 1848; upon the delivery of such scrip, a transfer will be returned, according to the Cost-book Principle.

WM. SHEARMAN, Purser.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,

23, *HAWLEY-ROAD, KENTISH TOWN, LONDON,*

to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

TO MINE AGENTS, MINE SURVEYORS, &c.—W. WILTON,

MATHEMATICAL, PHILOSOPHICAL, AND OPTICAL INSTRUMENT MAKER,

ST. DAY, CORNWALL,

Begs to call the attention of MINE AGENTS and SURVEYORS to his MINER'S THEODOLITE, and other IMPROVED INSTRUMENTS, adapted to MINE SURVEYING; and to assure them, that, from many years' constant application of his energies in one of the most active mining districts to this particular branch of mathematical instrument making, he flatters himself he is able to furnish instruments, equal in point of accuracy and workmanship, and superior as regards adaptation to the wants of the miner, to those supplied by almost any other house.

*** A descriptive price list sent free per post, on application.

STEAM-ENGINES.—From 8 to 20-horse power ENGINES ALWAYS IN STOCK.

Apply to Mr. CAPPER, Engine-Maker and Founder, BIRMINGHAM.

Price—£12 to £16; with boiler, £22 per horse.

COMBUSTION of COAL, CHEMICALLY & PRACTICALLY CONSIDERED. With coloured plates.

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33

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34

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35

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36

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PUBLIC MEETING ON THE COPPER ORE DUTIES.

[In our last Journal we gave a brief notice of the meeting of gentlemen interested in copper mines, which took place at Pearce's Hotel, Truro; the subject of discussion being one to which we attach the utmost importance, we avail ourselves of the following detailed report, published by the *West Briton*, as presenting many additional particulars.]

On the proposition of J. H. TREMAYNE, Esq., seconded by the Rev. Canon ROGERS, the chair was taken by the Right Hon. the Earl of FALMOUTH.

His LORDSHIP first read the requisition by which the meeting was convened, and which was signed by the four county Members and himself. He then addressed the meeting to the following effect:—Gentlemen,—Before the proceedings commence, and the resolutions are proposed which have been drawn up, I beg to remind you—for I am told that an unfortunate misapprehension has gone forth on the subject—that this is not a protectionist meeting, that in no sense has it been called together for any political purpose connected with free trade or any other subject, but simply with a view to obtain such a deputation as may assist, by their statistical information, and to the best of their abilities, our county Members, and other representatives in Parliament, in the discharge of what they may conceive to be their duty with reference to any proposal that may be made regarding the duties on copper ore. This does not at all imply that they are to take any one particular line of conduct; that is left entirely an open question. The present question is, whether will you or will you not appoint such a deputation? And if you answer that in the affirmative, will you provide them with funds? And if so, from what source will you raise those funds? I believe I shall be justified by those who joined me in the requisition, in stating that what I have mentioned is the sole purpose of this meeting, and I beg you will not be led away into any free-trade discussion, for which this is neither the time nor the occasion.

Sir CHARLES LEMON, Bart., M.P.—Lord Falmouth has explained so clearly the object of this meeting, that it will not be necessary for me to say a word upon that subject; and I proceed to discharge a duty which I am very sorry to have to undertake—namely to make Mr. Pendarve's apology for not being present on this occasion. He his unfortunately very unwell, and wrote to me, desiring me to make an excuse for him, and to say that he will most readily concur in anything that may be determined on by the majority of this meeting. I trust I need make no apology for having, in concurrence with my colleagues and Lord Falmouth, taken the liberty of requesting you to meet us here today. I beg to assure you, that we were not actuated by any desire whatever prematurely to moot a question, which had best, perhaps, be left at rest. Nor do we seek to shift from our own shoulders any responsibility or labour, that properly belongs to us. But I beg you to consider, that in this matter we shall be met by merchants having the whole details of business at their finger ends, and great experience to appeal to. Many of their statements too have been, perhaps, carelessly made, and are singularly inexact; and, to enable us to scrutinize them fairly, we do want the assistance of practical men, versed in the details of trade. Now, whether it may, or may not, be your pleasure to grant us the assistance which we now apply for, I can assure you, on the part of my colleagues and for myself, that no exertions shall be wanting to elicit the truth, and to do you justice. What we seek is justice, and a fair inquiry into the truth of the case. (Hear.) But as I have told you, we shall be met by men of practical knowledge; and, to test their statements, we have no information to appeal to except what we obtain from public documents, which deal with general results, and do not interfere with causes in any way whatever. If this matter is to be examined into by a committee of the House of Commons, as it probably will be, it will not be satisfactorily disposed of unless we can meet details with details. If it is, indeed, true that a great change has come over the copper trade of this country, and that we have lost, I will not say the monopoly, but the predominance over the trade, so that this country has no longer any influence on prices in the markets of the world—if all this can be proved, and that it is fairly attributable to the effect of the duty, then I believe the duty itself does us no good; and it would certainly be a very great injury to us that the copper trade should be driven abroad. But this has not yet been proved, nor can it be proved by such documents as have yet been laid before the public. If it were necessary, I could, from the papers now before me, refer to statements made before the committee on navigation, which certainly do exhibit a degree of inaccuracy and carelessness on the part of our opponents, which it is requisite for us to examine into. I do not impute to them a deliberate design to deceive, but I know that they *did* deceive, and that many of their statements left impressions on the minds of members of that committee, totally opposite to the actual fact; and, therefore, on any future occasion, it is quite necessary that we should have some persons present, able to assist those whose duty it will be to cross-examine witnesses. Now, with regard to the probability that this question will be mooted in the next session—first, I have reason to know it from private information, and I also know it from having seen at the Treasury two memorials which have already been presented there, praying for the abolition of the duties. There are a few topics in those memorials which I have extracted, and which I think it is well to allude to now, because it is important that we should be put in possession, as early as possible, of the points which are to be attacked, so that we may provide ourselves with such information as may be necessary to meet the attack. The first allegation is this:—"That the chief article of import from Chili has all but ceased;" and "that we are now confined to silver as a return." It is perfectly true that there has been a considerable falling off in the importation of ores generally, and, therefore, I suppose to some extent from Chili. The comparative statement by the Board of Trade, has been made out only for 11 months; but I find that in the first 11 months of the year 1845, the ores imported generally, into this country, for smelting, amounted to 51,000 tons; in 1846, to 47,000 tons; and in 1847, to 35,000 tons. So that there has been a considerable falling off; and, very probably, some portion of it may have fallen on ores imported from Chili. But it is not at all likely that it should have been to the extent warranting the assertion—"that the ores from Chili have all but ceased, and we are now confined to silver as a return." However, in the absence of any details on this subject, I can only say that this statement is the same in effect, and almost the same in words, as one made last year, relative to 1846, when the importations from Chili amounted to 13,565 tons of ore—the largest importation ever known except in 1843 and 1844. It was said, of that time also, that the importation of ores from Chili had all but ceased. Mr. J. Williams has very kindly given me an account of Chili ores imported into Swansea alone, during 1847; and I find that it amounted, on a rough estimate, to 2522 tons of copper—this does not look like a cessation of trade. The next allegation is that, "the United States and Germany are tempted by a facility of remittance, of which we are deprived." If they have this facility of remittance of which we are deprived, it implies that they import a larger quantity of Chilian ores than we do. I think, on the face of it, that this must be incorrect; but I have no absolute means of showing it. It is perfectly true that small cargoes of ores have been sent from Chili to Hamburgh, but I believe that this results from the state of the navigtion laws, which prohibits foreign vessels from landing their return cargoes here, and therefore they must carry them somewhere else. Under these circumstances, it is possible that they may have been forced, to a very small extent, to smelt at Hamburgh with English coal. Then comes a statement that—"large arrivals of copper equal to English, are constantly occurring at Havre and Bordeaux." I have not yet obtained any positive information on that subject; but it will be one of the first duties of the deputation, if you may be pleased to appoint one, to ascertain the accuracy of that statement; and this they can easily do, by inquiring what are the prices at Havre and Bordeaux. If this Chillian copper has been sold at an inferior price, it can hardly be contended that its quality can have been equal to English. In the correspondence connected with the memorials, it is said that "Americans and Germans pay much better prices than we can afford to give for ores from Chili," and further, "that smelting in Chili produces 8000 tons of bar-copper annually." Now 8000 tons sounds like a very large quantity. But I think there is a little ambiguity in the term bar-copper. Because, in a pamphlet published by the Liverpool merchants last year, I find this comment on their own statement to the same effect—that the assertion meant simply this, that the exports from Chili of bar-copper and regulus, contained a quantity of copper equal to 6000 or 8000 tons annually. You see that, according to this Liverpool logic, bar-copper is regulus, and the act of smelting is merely making regulus; accordingly, if we receive their explanation of their former correspondent's words, whose statement these merchants have deliberately adopted and printed, I suppose we are bound to consider the 8000 tons spoken of now as regulus; on the other hand, if they are tons of copper, they are no more than merely the *maximum* of the ordinary amount of smelting in Chili. There is a second memorial, which says that "copper ores have been sent from Chili to France and Sweden—a circumstance heretofore unprecedented." I conclude that the word "unprecedented" applies to Sweden only; because we know it has been the groundwork of the former complaints, that a very large quantity of copper ores, which would otherwise have been sent to this country to be smelted, have been sent to France. With regard to Sweden, I know nothing. That is a subject concerning which the deputation will probably be able to inform themselves, before the matter is discussed. With respect to France, I have only to say that the importation of Chili ores into that country in 1846 was considerably less than it was in 1845. The returns for 1847 have not yet been received, and, therefore, it is impossible to say exactly what the importation was in that year. I believe I need not comment on any further topics in these memorials. It is probable that other memorials will be presented in the course of the ensuing session; but I do not expect that there will be any particularly new matter brought forward. In point of fact, we are in possession of the strength of the case of those parties who desire the removal of the duties. Stripped of all the exaggeration that has been employed, their statement amounts to this—that there has been a gradual decline in the importation of ores generally—that the course of trade, the quantity of guano imported into this country, and other causes, have made back freights to Chili exceedingly cheap: so that a considerable quantity of coal has been sent from this country to Chili, for smelting there. Then again, I believe it is perfectly true, that the importation of metal from Chili into France has been greater than heretofore. And also, it is true that there has been a small smelting establishment formed at Hamburg. Whether or not the efficient cause of all this is the duty, or whether it does not result from other causes—the operation of the navigation laws, for instance—is matter for future inquiry. We have nothing to do with that at present. It is, however, a consideration which I think we ought to entertain, that it there is any idea of modifying the navigation laws, it would be prudent and wise to see what the effects of that change will be before the duty is altered. But I will not touch on that subject. All I want to say further is, that my colleagues and myself, in the situation in which we stand, and with the greatest desire to do our duty to you and to your constituents generally, are not altogether competent to the inquiry that will devolve upon us. But I beg to assure you that we will exert ourselves to the utmost of our power. I must, however, impress upon you, that if the case is left entirely in our hands and we fail, it will not be fair to impute to us the whole credit of the failure. Sir Charles concluded by proposing the first resolution [which, with the others, will be found in the last Journal].

The Rev. Canon ROGERS seconded the resolution. Before putting it to the meeting, the chairman inquired if any other person wished to make any observation.

CARTERET J. W. ELLIS, Esq., said—If no other person will come forward, I should wish to address a few words to the meeting against the resolution; and for this reason:—It appears to me, that any deputations going up to assist the county Members in this matter, must be viewed by Parliament and the Government as a deputation for assisting protection, and to assist in keeping on the duty now existing on copper ores imported into this country. The real question at issue is, whether it is for the interest of the owners and adventurers in mines to endeavour to retain the existing duty, which is considered in the light of an actual protection. I, for one (interested, as I am, to only a small extent in copper mines), conceive that we derive no real benefit from that duty; and, therefore, it would be for our interest to give it up while the option remains to us. Sir Charles Lemon has very ably exerted himself in this matter; but I take it, that he and the other Members can have no hope that this protection will be eventually maintained; but that free trade principles will be carried out by the Government in copper ores, as well as other articles, and duties be retained only for the purposes of revenue. Before proposing that which I conceive it my duty to propose—an amendment to the resolution just moved—I would advert to one point mentioned by the hon. baronet, which has reference to the smelters interested in this question. It was stated, that some small movement had taken [illegible]burg, for establishing works in opposition to the works in Wales. Now I [illegible], from a short intercourse with Mr. Cobden, who has just returned from Ramm[illegible]. He knows there is a merchant there who is erecting very large works, and importing coal from England, in the hope that we shall still retain the duty on copper ores imported into this country. That, I consider, is a very important feature for consideration. At the same time, as I said before, I conceive that we shall gain nothing by retaining the duty now levied, and that it is very likely to injure our smelting interest. The fact is, that the more copper there is produced, the more consumption will be found for it in all the markets of the world; and (as in the case of tin when the duty was diminished) so far from prices falling, they are likely to rise in proportion to the general demand and consumption. It is my opinion, that if this deputation is appointed for assisting the Members in the ensuing debates in Parliament, it must be considered as a deputation assisting in the effort to keep on the duty as a protection; and I shall object to any funds being levied on the mines for that purpose.—Mr. Ellis then moved the following amendment:—"That, repudiating those erroneous principles of protection involving unfair preferences to some one class of society at the expense of another, we avow our willingness to cast in our lot in common with our fellow-citizens throughout the empire; and, having faith in the sound policy of the equitable doctrines of free-trade, we are content to acquiesce in their application to copper ores, equally with all other articles of commerce."

The CHAIRMAN inquired if any one would second the amendment, upon which W. K. NORWAY, Esq., said, rather than a great principle should fail to the ground for want of a seconder, he would beg to second it.—The CHAIRMAN observed, that he felt some difficulty in putting the amendment, because it had so little to do with the purpose for which the meeting was called; but as it had been proposed and seconded, of course it was his duty to put it. The amendment and original resolution being then put, only the mover and seconder held up their hands for the former, while the latter was declared by the Chairman to be carried by a considerable majority.

J. H. TREMAYNE, Esq., then said—I have been requested to propose the gentlemen who should form this deputation to go to London to assist the county Members. I beg to say that I give no opinion whatever on free trade. I believe that nothing in any previous transactions, or anything that has passed before we came into the room this day, will pledge any person to go up with any convictions on one side or the other. The state of the case is this. I apprehend that in the last session of Parliament this question was brought, by petition of some Liverpool merchants, before the House of Commons. It was then discussed, and almost agreed—I thought entirely agreed—that the facts would be best inquired into by a committee in the present session. The Ministers, then, up to this time, for their own purpose or some other purpose having retained this duty, and, in common with others, having agreed that in this session the whole question should be fairly thrashed out, I think it would not be fair to leave to our county Members, men unpractised in trade, all the labour of that question, which must be so thoroughly thrashed out, that it only can be by persons practically acquainted with the question in all its details, and who can make statistical inquiries on matters relating to trade. The sole view I had in coming forward this day was to obtain for our county Members the assistance they require. Whatever my opinions may be, I do not express them here, as to repudiating the principles of free trade, or anything of the kind. It then becomes a very delicate and difficult matter to propose the names of the deputation. I certainly had intended, in the first instance, to propose the names of three gentlemen only, who have some interest in the copper trade, and matters of trade generally—Mr. Joseph Carne, Mr. Bolitho, and Mr. Alfred Fox. I do not mean to say that those gentlemen have not a very competent knowledge of mining; but there is a feeling that we should have not only persons connected with the copper trade, but also with the copper mines. We have now among us a gentleman of high station in the county—our present High Sheriff—to whom we are so much indebted on other grounds. (Hear, hear.) He is really a practical miner, and it has been suggested to me that the addition of his name to this deputation would be of essential importance. After then reading the resolution for appointing the deputation, Mr. Tremayne remarked—I wish merely to say that, whatever opinions there may be in favour of free trade, it cannot be denied that there is a large body of the inhabitants of this county who hold the contrary opinion; and if the principles of free trade are right, it is quite proper they should be disabused of any prejudices they may have. Prejudices I call them, but I don't mean to use the word in an invidious sense; in fact, I should rather say they were opinions.—R. PEARCE, Esq., seconded the resolution for appointing the deputation.

N. KENDALL, Esq., the high sheriff, observed, that Sir Charles Lemon had stated the need of having practical persons acquainted with the details of trade. Now, on trade he possessed no information; he could only lay claim to a little practical knowledge of mining, and they had better appoint some one more able than himself.—Mr. CARNE said, the state of his health had been such of late, that he did not feel himself capable of entering on business of this kind. He was only concerned to a small extent in copper mines, and thought the deputation ought to be composed of persons more interested in them than he was. He had stated those reasons and some others in the other room before the meeting, when his lordship and others were pleased to say that they might want some information from Cornwall. Now, he should be very glad to correspond with the deputation from Cornwall, and give them all the information in his power; but from acting in any other way, he must beg to be excused.—Mr. BOLITHO said, he knew so little of the circumstances of the copper trade that he felt altogether incompetent to act as one of the deputation; besides which, some other matters now engaged his attention, so as to render it impossible for him to attend; but if he could give any information, he should be happy to do so.—Mr. ALFRED FOX thought the other proposed members of the deputation were far more competent than himself. He hoped the other three would allow their names to stand; indeed, he thought they must lay a strong hand on them, and require them to do so. (Laughter.) With regard to his friend, Mr. Carne, saying he was very little interested in copper mines, that was a reason for his being on the deputation, because he would be strictly impartial. (Hear, hear.) Without going into the question of free-trade, as to whether it be right or not, he (Mr. Fox) contended that this was an exceptional case; for there was now a large duty on the raw material of timber, tallow, and iron. The duty on timber was a new one as to its amount; the tariff of 1842 increased that duty to more than double what it was before.—Mr. CATERET ELLIS: Then get rid of those duties.—Mr. A. FOX: But we have not got rid of them.

The CHAIRMAN said it was pleasing to hear these disclaimers; but he must remind those who made them that the meeting could perhaps better judge of their capabilities than themselves. (Hear, hear.) He then put the resolution, and it was carried.—Mr. BOLITHO hoped they would appoint a more competent person in his place; besides which, he thought he should not be able to attend to the duties of the deputation.—Sir CHARLES LEMON said, there was no man in the county from whom he had received more assistance than from Mr. Bolitho; he should be very sorry to have the deputation without him.—Mr. KENDALL thought the three would not do without Mr. Bolitho as the fourth.—The Rev. Canon ROGERS: The question having been disposed of as to the appointment of a committee, I have been requested to propose that means be devised for carrying the last resolution into effect. Of course, watching the proceedings of those who are opposed to the copper duties, must involve a certain amount of expense, and that expense cannot be better thrown than on the ore we wish to protect. Without entering on the subject of free-trade, or protection, it is our object, I conceive, to sustain the working of our copper mines in an efficient state, in a state of continued and profitable working, by whatever means that can be done. Now, the plan originally adopted, under similar circumstances, I believe, has been to raise the necessary funds by means of a small per centage on the copper ore of this county. The obvious mode of meeting the expense seems to be by a duty on copper, which is the easiest mode of raising it, and one that has long precedent in the county. The sum proposed to be raised in that way will amount to about 1-16th of a penny in the pound on the copper ore raised in this county, which is so small that I cannot suppose any objection will be made to the proposed mode of meeting the necessary expense. He then moved the third resolution.—J. ENNIS VIVIAN, Esq., M.P., seconded the resolution, which was carried *nem. con.*

T. J. A. ROBARTES, Esq., M.P.: The very able and clear statement which the noble lord in the chair made at the commencement of the proceedings on this occasion, I am happy to say, relieves me from the necessity of entering into any explanation of my own views. I entirely coincide with what he said regarding the object of the meeting, and only add, that I signed that requisition merely with the object expressed on the face of it. I did not intend to give any opinion as to the comparative merits of free-trade, in connection with the copper question—still less to bind myself in any way as to what vote I shall give when the subject comes before the House of Commons for discussion. My opinions on political matters are generally pretty decided; and I trust that, at the proper time and place, I shall not shrink from expressing them boldly and fearlessly; but, on the present occasion, I do not see any necessity for entering into the question, and shall better consult the convenience of the meeting, by at once proposing the next resolution. He then read the fourth resolution.

J. S. ENNIS, Esq., seconded the resolution, which was put to the meeting, and carried.

JOSEPH CARNE, Esq., referred to a remark by Mr. Ellis, who had heard from Mr. Cobden, that a gentleman of Hamburgh was about to build extensive works for smelting there, on the presumption, that the duty here would not be taken off. He had just been calculating what the cost of coal would be at Hamburg. That gentleman, if he imported coal from England, would most likely import it from Newcastle, which was the nearest port; and for copper ore, the produce might be taken at 20 in 100—that being the average produce of Cuba and Chili ores taken together. Now, 2½ tons of Newcastle coal, for smelting a ton of ore, would cost, in freight, 20s.; and taking 5 tons of ore to make 1 ton of copper, that would make 5*l.* on every ton of copper, for the freight of coal alone.

Mr. ELLIS replied, that the Germans were shrewd calculators, and understood their own interest as we do in Cornwall. Any opposition he had brought forward that day was entirely on principle; and having performed what he conceived to be his duty, he had abstained from any further remark, bowing to the sense of the meeting as to the appointment of a deputation. He had mentioned a fact, coming, certainly, from a very high authority on the principles he had indicated, and he had no doubt of that fact. Mr. Cobden did not state the price at which this gentleman had contracted for his coal, or from what part of England it was to be exported to Hamburgh; but it was to come from England, and the retention of the duty had weight, in his calculation, of the works being remunerative. Sir Charles Lemon had stated, that the importation for smelting in England had declined in 1846; and if ores had been imported for that purpose into Germany and France, it explained the reason of that declension.

Mr. KENDALL observed, that his friend Mr. Ellis had given them an essay on free trade, which was not answered, because this was not a meeting for discussing protection, or free trade. If it goes out, that Mr. Ellis made such a speech, and it was not met in any way, that might do some harm; but the reason it was not met, was because his speech was apart from the object of the day. Many persons there would not object to meet it on a proper occasion.

Mr. ELLIS remarked, that the wording of the requisition brought him into the field.

Sir CHARLES LEMON said, the object of the requisition, as shown by the wording, was the appointment of a deputation.

Mr. TREMAYNE thought there was a strong reason for the appointment of a committee, if it were only to settle such questions as had arisen between Mr. Carne and Mr. Ellis.

W. H. P. CAREW, Esq., M.P.: I rise to move what would be generally a mere formal motion, but it assumes a degree of importance on this occasion, because of some misapprehension as to the object of this meeting; that, however, Lord Falmouth and Sir Charles Lemon have well explained. I think it is very important we should give publicity to our proceedings, and I beg to move, that these resolutions be published in the county papers. Lord Falmouth has precisely explained the view with which I signed the requisition; it was merely that we might have the best possible information, and that we may go to town to do our duties, as we are anxious to do them, in the best possible way.

J. T. TREFFRY, Esq., seconded the resolution. After it was carried,

J. H. TREMAYNE, Esq., proposed that the thanks of the meeting be given to Lord Falmouth for his kindness in taking the chair, and for his conduct in it.

Sir CHARLES LEMON said, that for the kind assistance they always received from Lord Falmouth, and for his clear explanation, at the commencement, of the grounds on which they were met, they were much indebted to him. He completely accorded with Lord Falmouth in that explanation.

The Earl of FALMOUTH said, he began with an explanation, and must end with an apology, for occupying the chair in the presence of her Majesty's representative—the High Sheriff; but he had only consented to do so after Mr. Kendall had firmly, but courteously declined to preside himself. He should not break through the character of their proceedings, by saying one word either for or against free trade; but he came there because he felt it necessary that our county Members should have aid in the discussion of the question of the copper duties. Without expressing his opinion one way or the other—although he admitted he entertained a strong opinion—he could not forget, that during the last year, in the mining district with which he was connected, there existed a fearful amount of distress, such as was only to be equalled, perhaps, in the sister country. He pronounced no opinion upon the cause of that distress, but it was quite fit that the matter should be discussed by our county Members, and that it be discussed whether the remaining copper duties should be repealed. He begged to thank them for the compliment they had paid him.—The meeting was then dissolved.

Subsequently to the meeting, the Earl of Falmouth received the following from Mr. Wyld, the Member for Bodmin:— "8, Park Village West, Regent's-park, Jan. 20.

"MY LORD,—I shall be happy to lend my humble assistance, either in or out of Parliament, to those noblemen and gentlemen who may be appointed to watch over any proposed measures which may affect the mining interests of the county of Cornwall. I regret that severe indisposition will prevent my attending your meeting.

"I have the honour to be, my Lord, your most obedient servant,

"The Right Hon. the Earl of Falmouth, &c." "JAMES WYLD."

The History and Practice of Mining in the British Isles,

IN RELATION TO METALLURGY.

MR. ROBERT HUNT'S LECTURES AT THE LONDON INSTITUTION.

LECTURE V.—SILVER: ORES—ARGENTIFEROUS GALENA—SILVER ASSOCIATES—MODES FOR THE SEPARATION AND REFINING OF SILVER—CHEMICAL AND PHYSICAL PROPERTIES—USES.

ZINC: MINING—LAWS RELATING TO ZINC AND CALAMINE WORKS—BRASS—MINERALOGICAL CHARACTER OF ZINC ORES—METHOD OF REDUCING—PHYSICAL AND CHEMICAL CHARACTER, &c.

On Thursday, Mr. Hunt commenced by saying, that the subject of silver arose naturally out of the consideration of lead, into which they had gone at the last lecture, as silver occurred often in lead ores, particularly in the steel grain ore. It could not be strictly said, that there were now, or ever had been, true silver mines in the United Kingdom, though from a very early period many mines were worked with the view of extracting silver from the lead and copper ores with which that metal was united. It was not, however, the case that silver was exclusively united to those two metals, as it was sometimes found in a native state, and occasionally beside other minerals. Still, it was never found alone in quantities sufficient to be sought by independent mining operations.

The use of silver was known very early. The Corinthian bronzes were a combination of copper and silver; and, in Britain, it was pretty certain that silver was extracted from the ore very early after the Roman invasion; and it was believed that the silver coinage of Augustus, in this country, was made from the produce of English mines.

The process of separating silver from lead appears to have been known in the most remote ages; and it was curious that the most ancient description of these processes coincided almost entirely with those in operation in the present day. There had been, it was true, several important improvements in the last year or two; but the old methods, in some parts, were yet in use. The ordinary process, until lately, had been, to expose the lead ore containing silver to a heat sufficiently intense to fuse it, and then to submit it to the action of the atmosphere. The consequence was, that the lead was driven off in the form of an oxide, and the silver left behind. A reference to the earliest writings would show that the ancients were well acquainted with the process of separating the grosser metals from the silver. The Prophet Ezekiel, for instance, says, in the 2d chapter, and 18th verse, of his Prophecies:—"The House of Israel is to me become dross: all they are brass, and tin, and iron, and lead, in the midst of the furnace: they are even the dross of silver."—And they would also find in the Prophet Jeremiah, the following passage:—"The bellows are burned, the lead is consumed of the fire, the founder melteth in vain."—The alchemists, Van Helmont, Paracelcus, and Basil Valentine, described the processes in use in their day, and they were pretty much the same as those in use now. Lister gave the first description of British lead ore containing silver. From a trial, at Westminster, in 1690, it was learnt that Eskkyr-hyr contained 60 lbs. of silver to the ton of ore. It was now considered that 40 or 50 ozs. to the ton was a good proportion. If this were as it is stated, it was probably one of those nodular masses sometimes found even now, which were remarkably rich in silver. Though the lodes generally produced no more than 20 or 30 ozs. per ton; yet these nodules often contained four or five times that quantity.

In the time of Elizabeth, a charter was granted to a company, whose duty it was particularly to look after the mines royal, which belonged to the Crown. Sir John Pettus, in his *Fodinæ Regales*, gives the following account of the mines royal:—"Where the ore which is digged from any mine doth yield, according to the rules of art, so much gold or silver as that the value thereof doth exceed the charge of refining, and loss of the baser metal wherein it is contained, or from whence it is extracted, then it is called poor ore, or a poor mine. On the contrary, where the ore digged from any mine doth yield, according to the rules of art, so much gold and silver, as that the value thereof exceed the charges of refining, and loss of the baser metal in which it is contained, and from whence it is extracted, then it is called rich ore, or a mine royal—it is appertaining to the King, by his prerogative. And herein consists the skill and honestie of the refiner; for some have made very great products from that very ore from which less skilful assayers could extract nothing." From time to time disputes occurred between the discoverers of mines and the Crown, as to whether they were mines royal or not; hence it became the interest for the one party to prove that the lead contained as much silver as possible, and the other as little. In consequence of these disputes, a change was made, in the reign of William and Mary. It was then enacted, that their Majesties should have the privilege of purchasing, at fixed prices, any of the ore raised from a mine royal; and at that time the price fixed for lead ore was 9*l.* a ton.

Such was the history of the mines royal, some of the laws relating to which were still in force; and some discussion respecting them had lately been raised by the working of a mine, in Wales, on a small scale, for gold.

Silver, as he had before mentioned, was mostly associated with copper or lead. In Cornwall, in many instances, it was combined with copper, some of the lodes of which were rich in silver. The gossans, of which he had before spoken—an ochrey substance found at the back of the lode, all contained silver, and some were very rich in this respect. Notwithstanding this, nearly all the gossans were allowed to be thrown to waste. Not long ago, a gentleman from Sheffield, a gold and silver refiner, visited Cornwall, and purchased a large quantity, sufficient to freight two ships, at a very low price; and, though the cost was greatly augmented by the expenses of carriage, by the time it was delivered in Sheffield, he extracted a sufficient quantity of silver from the mass, as to afford him a large profit. Though the gossan was found in the vicinity of the lodes, no man at present was employed in extracting the silver from it.

The talented lecturer then proceeded to describe the numerous specimens of ore which lay on the table. Among these, was a beautiful nodular specimen of native silver ore, found at Combmartin, in Devonshire. A considerable number of ores from Mexico showed the condition of the silver as it occurred in that country; it was there in general as a sulphuret of silver. An interesting specimen of galena had been furnished by the kindness of Mr. P. N. Johnson, in which the formation of the silver in a most curious manner was developed. The lump of ruby silver on the table was a very fine ore; it generally contained its various constituents in the following proportions:—Silver, 64·67; arsenic, 15·09; sulphur, 19·51; antimony, ·73. Another specimen exhibited a layer of carbonate of iron, and a layer of native silver in combination. It had formed part of a side of a copper lode, which often threw out native silver in the same manner, that in the copper lodes the gossan appeared to be thrown out. Some who were present, might remember that at the last *soirée* held in the Institution, a beautiful specimen from Lake Superior lay in the library, and that all over it was spread little tufts of silver, and he now exhibited a specimen in a very similar condition to that which would be necessary to produce those tufts. In Sheffield an experiment had been tried with the slag from the furnace—a large portion of which was known to contain copper, lead, and silver. It was connected with a galvanic battery, and placed in water slightly acidulated; and in the course of three or four weeks, the iron was thrown out as an oxide, and incrusted the glass; this incrustation was found to contain a considerable portion of silver, and the process being carried on for a sufficient time longer, the whole of the silver was separated by the decomposing action of the voltaic pile. It was this sort of action, he believed, which had produced the tufts in the specimen now on the table, and in the other more beautiful one, which he had mentioned. Occasionally, this precious metal was found as a muriate in some parts of Cornwall, but very rarely. There was one very curious phenomenon peculiar to lead rather than to copper lodes, well worthy of notice, and that was the appearance of a light or lambent vapour over the surface of the lead lodes which were rich in silver. Some few years ago, when the secretary of the Cornwall Polytechnic Society, many well-authenticated instances of this kind came under his notice. On making inquiry, he found that this appearance was exclusively confined to the lead lodes; and he remembered one at Swanpole, near Falmouth, in which, in nights of ordinary darkness, this luminous appearance was particularly visible. He had also observed, where two lodes intersected each other, in the Gwennap district, that the vapour arranged itself over the lode in two banks, showing the intersection in a marked manner. The celebrated mines at Potosi were discovered, it was traditionally believed, by a luminous appearance of this kind, which excited curiosity, and occasioned the making of excavations to discover the cause. At present nothing was known of the origin of this extraordinary appearance, and the Polytechnic Society had offered premiums to secure a collection of information which might lead to the discovery of its causes.

There was an official statement in existence, to the effect that, in the reign of Edward I., near 1600 lbs. weight was obtained in three years from a mine in Devonshire. No mine at the present time produced anything near so large a quantity. As he had mentioned before, silver coin had been minted at Shrewsbury and Aberystwith, and Sir John Pettus, in his *Fodinæ Regales*, gives a full account of the smelting works connected with them. Webster named two places in the West Riding of Yorkshire, and at Patterdale, near Keswick, where ores very rich in silver were found. Pennant informs us that the following quantities of silver were extracted at Holywell in his time:—1754, 12,160 ozs.; 1755, 1276 ozs.; 1756, 7341 ozs.; 1774, 5693 ozs.; 1775, 6704 ozs.; 1776, 4347. In 1846, the produce of the kingdom was estimated at about 393,312 ozs. Formerly, when lead ore contained less than 20 or 30 ozs. to the ton, it was not considered sufficiently rich to pay for separation—the old process being very wasteful and expensive. It was exposed in a furnace to the operation of heat; the lead being got rid of by oxidisation, and the silver left behind. A new process of separation was not long ago discovered by Mr. Pattinson, who took advantage of the different temperatures at which the two metals crystallised. By keeping the metallic mass at the lowest temperature at which it remained in a state of fusion, the lead became crystallised and actually squeezed out the silver. By this means it was remunerative to separate the metals when the proportion of silver was but from 12 to 15 ozs. to the ton. In Mexico, the silver was separated by a very different process—namely, by taking advantage of the affinity of silver for mercury, when it was in the state of a chloride. [On the table was a beautiful specimen of native chloride.]

The learned lecturer then passed on to the subject of zinc. This metal, though found in all the ancient bronzes and brasses, was totally unknown until a comparatively recent date. Albertus Magnus says that *tutia* (or zinc) was employed in transmutation; and this admixture being a brass, almost identical in appearance to an unpractised eye with gold, might easily encourage the belief that it was possible to transmute the baser metals into those which were more precious. The furnace calamine, or flowers of zinc, which was in fact a white oxide of zinc, was employed, in 1569, by Erasmus Ebener, in making brass. In England, before the time of Elizabeth, calamine was held in little estimation. At that period it was carried out to Holland as ballast for ships. The Dutch, who were fully aware of its value, carried off in this way large quantities of calamine from Mendip; but afterwards, when it was discovered that they employed it for the purpose of making brass, a desire to establish brass-works in this kingdom arose, and the exportation of calamine was prevented. But the metal zinc was still unknown, though it was suspected that the calamine contained an undiscovered metal of some sort.

It is said that, about this period, an Englishman went to China to learn the art of separating this new metal from the calamine; and returning, fixed at Bristol; but history is silent as to his success.

Previously to this, chemists appear to have separated the metal. It is said, that Brandt, in 1735, separated zinc from calamine, and Dr. Isaac Lawson gives the first account in English. This was also named by Price, and Dr. Campbell in his survey. A Mr. Van Swab instructed Mr. Champion, of Bristol, in the art in 1737, and that gentleman established a manufactory in 1743, the date of his patent.

In 1565, Elizabeth granted a patent of all the calamine within the English pale, in Ireland, to William Humphrey and Christopher Shutz, "and the use of it for the mixed metal, called *latten*, or brass." The *latten*, here mentioned, was made by placing stratified sheets of copper, and pounded calamine, in a furnace, and the result was sheet brass.

In 1650, one Demetrius, a German, set up a brass-works in Surrey, at the expense of 6000*l.*, and employed 8000 persons in the manufactories of brass in 1670.

They would remember, that in speaking of the history of copper, he had said that, in 1708, the brass manufacturers had petitioned the House of Commons to encourage the brass manufacture, "on account of the inexhaustible quantity of calamine in the country, which would occasion plenty of rough copper to be brought in." The calamine here mentioned was zinc, and an Act was passed, prohibiting its exportation.

It might appear strange, that zinc should not have been discovered sooner; but the wonder would cease, when they remembered how easily that metal was oxidised in the fire. If a piece of calamine were exposed to the action of fire, no metal would be obtained; for as fast as the mass became deoxidised, the action of the atmosphere neutralised the process, and it returned to its original state. The mode employed by Mr. Champion, as well as that of Brandt, at an earlier period, was, in fact, a process of distillation. The calamine, with an admixture of lime, was placed in a crucible, from which the atmospheric air was excluded—a pipe from the bottom of the crucible passed into a vessel of water, and, after a time, when the metal was in a state of fusion, a tap was turned, and it flowed into the water, where it was cooled, before it had time to become oxidised by the action of the atmosphere. Though somewhat modified, the process now in use was nearly as possible the same as that introduced by Mr. Champion, in the middle of the last century. There were few subjects more worthy of the metallurgist and the chemist than the reduction of the zinc ores—the present process being most expensive and wasteful. The metal was every day becoming better known, and more used; and if any ingenious person could discover any better way of manufacturing it, he would open a mine of wealth to himself, and confer a great benefit upon the community. The lecturer then proceeded to describe the various specimens of zinc ore which lay upon the table. The constituents of the most useful ores were as follows:—Red oxide of zinc consisted of oxide of zinc, 92; oxide of iron and manganese, 8: calamine carbonate of zinc contained oxide of zinc, 64·88; carbonic acid, 35·22: sulphuret of zinc contained zinc, 61·5; sulphur, 33·0; iron, 4·0; silica, 1·5. The silicious oxide of zinc contained oxide of zinc, 66·83; silica, 24·89; water, 8·28.

The sulphuret of zinc, when combined with copper ore, rendered the latter poorer, though the miners in Cornwall believed that it indicated the neighbourhood of richer ore, and they expressed their impression in the saying—"Black jack rides a good horse." In the north, however, a different opinion prevailed. The Derbyshire miners had a saying—"Black jack eats up the lead." The deposition of zinc, and its associates, exhibited, in a high degree, the nice adjustment and beautiful regularity which marked the arrangement of minerals in general; but he would not dwell upon this subject, as he intended to allude to it more fully in his next lecture.

The great use of zinc was its admixture in the manufacture of brass, by a combination with copper. Sometimes a native combination of this kind was found; and a specimen, which he exhibited, possessed the remarkable peculiarity of being phosphorescent, when rubbed with any other hard substance. Zinc, united in various proportions with copper, formed all the varieties of brass from that most beautiful of combinations—ormolu—to the most ordinary kinds. Combined with lead, it produced pewter. The quantity of zinc obtained in this kingdom it was scarcely possible to estimate, in consequence of the great number of small manufactories; but the exports and imports were as follow:—

	Imports.	Export.
1836	8,931	5,002
1837	4,716	2,518
1838	5,374	1,570
1843	4,102	7,840
1844	5,381	7,192
1845	10,218	3,818
1846	2,461	5,997

One of the most valuable applications of zinc was in the form of what was called Muntz's metal, a brass which was largely used for sheathing ships. In the first instance, this combination was exceedingly brittle; but the application of a high temperature changed its character to one of remarkable toughness.

Zinc galvanised iron in two ways—namely, when it was actually combined with iron; and, secondly, when it was a mere surface created by plunging the iron into the melted zinc. The other uses of zinc were of the greatest possible importance.

Mr. Hunt concluded his interesting lecture by lamenting that, notwithstanding the vastness of the mining interests of Great Britain, no system of mining education had been introduced into this country. The miners as a body, knew very little of metallurgy, and were ignorant of chemistry altogether. He expressed a fervent hope, that the examples of France and Germany would, in this respect, speedily be followed. (Applause.)

The next lecture, which will comprise an account of [illegible] manganese, nickel, and the rarer metals, and a general view of [illegible] deposits, will be reported at length in the *Mining Journal*.

[Reports of the meetings of the Geological Society, and the Institution of Civil Engineers, are inserted in the 11th page.]

SWANSEA IRON SHIPBUILDING COMPANY.—This company will shortly be ready to commence operations, under the immediate superintendence of the managing partner, Mr. Sturge, formerly with the Neath Abbey Iron Company, from whose designs the *Neath Abbey* and *Port Talbot* steamers were built. We trust that this spirited company will meet the encouragement they deserve.—*Swansea Herald.*

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—In the 18 fm. level end west, the lode is small, producing stones of ore. In the 12 fm. level end west, the lode is also poor. The stopes (over Doyle's), in the back of the 18 fm. level, is worth from 14*l.* to 16*l.* per fm. The back and bottom of the 12 fm. level is producing ½ ton per fm., for about 8 or 10 fms. in length. In the adit end east the lode is about 2½ ft. wide, composed of gossan, with lead irregularly mixed through it, the back working on tribute, and this end will produce ½ ton of lead per fm. We are sinking Dooge's shaft about 4 fms. south-east of the end, which has been unwatered by the adit level. The water is still falling in Nangle's shafts, and also the old working to the south of it; the lode's underlay is about 45°; and the back over the adit end, on its course to surface, is about 15 fms. altogether—I do not consider the whole of it will produce ½ ton per fm.; the present end is so far east as Dooge's shaft, which you will observe on the plan.—Jan. 29.

BEDFORD UNITED.—At Wheal Marquis, in the 90 fm. level, east of the sump winze, the lode is 2½ ft. wide, and worth about 25*l.* per fm.; in this level west the lode is 2 ft. wide, producing saving work. In the 90 fm. level, east of Hooper's winze, there has been no lode taken down. The lode in the 80 fm. level east is 2 ft. wide, producing good stones of ore. There has been no lode taken down in the 70 fm. level east; in the 70 fm. level west, on the south lode, there is no alteration. The lode in the 25 fm. level, east of the south engine-shaft, is 2 ft. wide, producing good stones of ore; and in the adit level east, on this lode, the lode is 2 ft. wide, producing good stones of tin and copper ore. We weighed at Morwelham, on Friday last, November ores, 116 tons 12 cwts., and sampled December ores, computed 116 tons.—Feb. 2.

CALLINGTON.—In the 125 fm. level, south of Johnson's engine-shaft, we have intersected a slide, and not yet seen the lode; to the south of this, in the north end, the lode is 1 ft. wide, intermixed with silver-lead ores. In the 112 fm. level, both north and south, ground is being opened that will work at a moderate tribute. In the 100 fm. level north the lode is not taken down. In the 90 fm. level the lode does not look so kindly; we have removed the men from here to sink in the bottom of the 80 fm. level, at the north mine, to communicate with the 80 from Johnson's shaft, where we discovered a small branch of silver-lead ores. At the north mine, in the 100 fm. level south, the lode is small, producing silver-lead ores. In the 90 fm. level south we are opening tribute ground; in the eastern level, driving towards the great cross-course, the ground is favourable. In the 70 fm. level east the lode is 3 ft. wide, intermixed with copper ores; we are now rising in the cross-course against the winze sinking in the same from the 50 fm. level, and expect to hole by the middle of this week, when we shall be in a position to increase our samplings of copper ores.—Jan. 31.

COATLITHE HILLS.—The men employed in clearing the level east from A shaft, have got as far as the old shaft from the surface; and I am in hopes, after we have passed it, the old level will be clear to the end.—Jan. 29.

CUBERT SILVER-LEAD.—We have this day held our setting as usual, for the month of Feb.—set 12 pitches, varying from 6*l.* to 5*l.* per ton, employing 25 men on tribute; also four bargains, employing 18 men on tutwork. In the end going east, in the 35 fm. level, the lode is 1 ft. wide, composed of spar, mundic, and stones of lead, but not rich; in the end going west, in this level, the lode is 10 in. wide—mundic, lead, and spar, worth 3*l.* per fm. In the end going west, in the 25 fm. level, the lode is 15 in. wide, carrying a leader 4 in. or 6 in. wide—very good for lead, worth from 6*l.* to 8*l.* per fm. In the 15 fm. level west the lode is 2 ft. wide, composed of mundic, lead, and spar, yielding some good saving work, and promising end.—Jan. 29.

DEAN PRIOR AND BUCKFASTLEIGH.—In cross-cutting through the lode in the 20 fathom level, I find it to be large, and of a very promising character; there is also a great deal of water coming out of the end, but we have not as yet discovered the north wall; the lode in the pitch, in the back of this level, is of a very encouraging nature, and producing some good work for copper. The lode in the pitch, in the back of the 10 fm. level, is rather poor at present, but that is no criterion, the indications being of such nature as to warrant a trial. The men in the pitches are working with spirit. I stated in my last, that the sinking in the engine-shaft had been stopped, occasioned by the late fall of snow, and the severity of the frost; this had impeded the progress of the water in the leat, which has caused a delay of about seven days as to the sinking; but, under these circumstances, and the speedy change that has taken place, as regards the weather, I calculate the water will be again in fork at the bottom of the engine-shaft, so that the sumpmen will again commence working before to-morrow morning. The drawing machine is nearly completed, with the exception of the masonry, and I hope the weather will be favourable to enable us to carry it into effect, together with the masonry for the crusher, so as to get the foundations, in order to get the level of the floor, for fixing the crusher with all possible speed.—Jan. 31.

DEVON AND COURTENAY CONSOLS.—We have extended our cross-cut north, since its commencement from the engine shaft, 7 fms. 4 ft., or about 3 fms. since we intersected the last branch of ore. The ground, at present, appears to be such as we might expect on our proximity to the lode, of which we are in expectation of intersecting very shortly. I have also set to drive on the branch discovered in the cross-cut; the men have driven west about 1 fm., and find the lode to be still productive, being 1 ft. wide, producing good saving work. Our shaftmen are prosecuting their work with vigour; the engine works well, and the pitwork in good order.—Feb. 1.

DRAKE WALLS.—In Brunton's engine-shaft we have good branches of tin, but still spare for sinking. The 50, east of Brunton's, has improved for tin since my last; in the stopes, east of Brunton's, below the 40, good branches; in the stopes, west of machine-shaft, below the 40, saving work; in the stopes, east of machine-shaft, below the 40, saving work, not rich. Nothing has been done in the 33 end, or stopes, since my last, in consequence of a large mass of ground falling from the gunnies above, which brought away the arch over the end and stopes—being fortunate for the men, it happened out of working time. It is now made secure, and the men will resume work on Monday next. The tinstuff fallen will pay for all timber and labour in securing, so that no loss will fall on the adventurers. Our last parcel of tin was sent off last Monday, but has not left Calstock as yet, waiting a barge, to send it to Truro; and we have now a barge, that has engaged to sail with it on Monday next.—Jan. 29

EAST CROWNDALE.—The ground in our engine-shaft is a close blue killas, intermixed with small branches of spar; we have sunk in the past week 3 ft. 6 in. The lode in the 47 fm. level west, on the north lode, continues to look well—the lode is 3 ft. 6 in. wide, composed of spar, capel, peach, mundic, and copper ore, worth 12*l.* per fm. The lode in the engine-shaft, at Rix Hill, is looking kindly, although at present it is poor, the lode is 2 ft. wide, composed of peach, mundic, spar, elvan, and, at times, good stones of tin. We have a pare of men raising stones for the engine-house at Rix Hill; and shall begin, in the course of next week, to prepare some copper ore for market.—Jan. 29.

GALLOWAY.—The lode in the shaft sinking here is large, and appears to contain more of spar and mundic as we proceed in sinking.—Jan. 29.

GADAIR.—The adit end, on the Hound's Cave lode, is a kindly lode; there is not as much copper in it as when I wrote you last, but we have not been without copper for the last two months; the end is composed of capel and killas, with fine stones and small branches of copper spangled through it; what can we expect?—this lode having only 8 fms. 4 ft. back. I have been a mine captain for the last 30 years in the largest mines in Cornwall; I will say I have never seen a finer lode in or out of Cornwall in my life. I am satisfied this lode will make copper, if worked in a mining-like way. The adit end, by the sulphur lode, is what I call a kindly lode, about 2 ft. wide, composed of fine spar, with small spots of copper; this end has about 15 fms. back; and, according to my dialling, we are 9 fms. north of the Fox lode. If the Fox lode hold its course, we have 16 fms. to drive east, before we shall fall in with that lode; we then shall have about 18 fms. back; I think this a kindly spot. The shaft, on the Hound's Cave lode, is now 9 fms. 4 ft. 3 in. under the adit level. We have got about 10*l.* worth of copper from it. If the bunch of ore hold down, that we have in the bottom of the 5 fm. level above, we may get from 50*l.* to 60*l.* worth of copper out of the back of the 10 fm. level. There is no dependence to be put on the flookan lode—it only makes small bunches; Painter and Jones get all their copper from the flookan part of the lode, and in no place work on the main lode; but they were no miners. I have been here seven years, and have driven four cross-cuts through the lode, and find the farther east, where the flookan is small, the kindlier is the lode. What can any one expect at this depth? We are, at this time, driving north through the H C lode. I think we shall drive 2 fms. for what we now pay for 1 fm., when we get to the north of the lode; and shall get on sooner when the north point lode falls in with the Hound's Cave lode and the large gossan.—Feb. 1.

GREAT MICHELL CONSOLS.—The lode in the sump winze is 6 ft. wide, containing mundic, fluor, peach, spar, and ore, producing some good saving work; the ground is also a little easier of progress. In the 35 fm. level, west of the sump winze, the lode, for the width of the end (4 ft.), is composed of mundic, spar, and peach, with a small proportion of ore throughout.—Feb. 2.

HOLMBUSH.—The ground in the 132 fm. level, south of the diagonal shaft, is favourable for driving, but neither branch has been intersected since last reported on. In the 120 fm. level, west of the slide, we have intersected a part of the lead lode, 12 in. wide, but we have not seen the western wall of it; it contains a branch of lead, 4 in. wide, and the remaining 8 in. is quartz, spotted with lead; we shall be able to report more fully in our next on its size and value; so far as it is seen it is a very promising lode indeed. The lode in the 110 fm. level, north and south of the cross-cut (on the eastern part of the lead lode), is 4 ft. wide, composed of quartz and lead, worth 10*l.* per fm. each end; the tribute pitches in the back of this level, on the western part, are producing some very good lead ore. The lode in the 100 fm. level south is 8 ft. wide, composed of quartz and stones of lead; within the last 6 ft. driving we have

intersected several east and west branches of spar, spotted with copper and mundic, varying in size from 1 in. to 3 in. wide, some of them underlaying north, and others south—no doubt they will be found connected with the flap-jack lode; in a short time greater light will be thrown on it, by the cross-cut we are driving east in this level, to prove the eastern part of the lead lode, which has apparently disordered the flap-jack lode, between these two parts; in the eastern cross-cut, in this level just alluded to, we have favourable ground for driving, and hope to reach the eastern part of the lead lode this week. The tributs pitches in the back of this level are producing a fair quantity of lead ores. The ground in the 90 fm. level cross-cut east is favourable for exploring. We sampled on Friday last, at Calstock Quay, Dec. and Jan. copper ores, computed 98 tons.—Feb. 1.

KIRKCUDBRIGHTSHIRE.—The severity of frost having set in, I regret to inform you that our pumping-wheel and drawing gear are completely shut up; we have employed some men to-day to cut away the ice in the wheel-pit and about the wheel, but without effect. The water is now in the 40 fm. level, and I fear we shall not be able to resume pumping till there be a change in the weather. The lode in the 40 fm. level end is 4 ft. wide, yielding stones of ore—set to day to 6 men at 3*l.* 10s. per fm., and 20s. per ton for saving the ore. The lode in the 30 fm. level end is large, upwards of 4 ft. wide, producing 1½ ton of lead per fm.—set to 6 men at 3*l.* 10s. per fm., and 20s. per ton for saving lead; Keith's shaft being sunk in this level, these men are engaged to drive back, to meet the 30 end, at 4*l.* 4s. per fm., and 20s. per ton for saving the lead. We expect to hole this in the course of a few days, which will give considerable advantage in discharging stuff from this, the most productive, part of the mine. The winze, sinking under the 40 fm. level, continues in a hard rock, producing about 1 ton of lead per fm.—set to 9 men, at 8*l.* per fm., and 20s. per ton for saving the lead. The setting list will further show that we have this day set 8 pitches to 25 men, at tributes ranging from 3*l.* 10*l* to 5*l.* per ton.—Jan. 29.

LEWIS.—The lode in the engine-shaft, which is now in the 70 fm. level, is 2 ft. wide, unproductive at present; the sumpmen will immediately commence to drive the 70 west, in order to get into the sump whim shaft, which we shall set to sink below the 60 to-day. The lode in the 60 east is 2½ ft. wide, worth 7*l.* per fm. I am happy to inform you, that the 60, east and west, on south branch, is much improved since last report. The 50 east, on south branch, is set at 8s. in the 20s. for saving the tin. The lode in the 40 east, on the south branch, is 6 in. wide, worth 3*l.* 10s. per fm. I think our prospects, in general, are much improved.—Jan. 29.

MENDIP HILLS.—The lode in the 38 fm. level, south of Stainsby's shaft, is at present about 3 ft. wide, composed of flookan, iron, and soft white spar—ground continues favourable for driving. Since my last report we have intersected another branch in this end, being about 1 ft. wide, composed principally of flookan and spar, intermixed with small strings of lead. In the slag department I have nothing particular to inform you; the weather during the past week has been so very severe, that but little has been done in this part; since my last—however, it is now somewhat changed, and hope, should it continue as at present, to get a good pile of slags dressed for the furnaces by the latter part of the week.—Jan. 31.

SOUTH WHEAL MARIA.—From the appearance of the ground in the north cross-cut, I believe that we are very near the lode, it being full of prian heads, containing spots of copper ore, and the water from the level having also considerably increased in the course of the last few days. The ground in the south cross-cut is without any important alteration.—Feb. 3.

SOUTH WHEAL TRELAWNEY.—The ground in the engine-shaft is not quite so favourable for sinking as it was—the strata is blue killas—not by any means hard, but not so speedy for sinking through as we have seen it; it is still spotted with lead and mundic, with prian heads; it is down 23 fms. below the adit level, and the work is being carried on as heretofore, all the time occupied, Sunday's excepted.—Jan. 29.

TAMAR SILVER-LEAD.—The lode in the engine-shaft is 18 in. wide, good work, and rich in quality. In the 160 end, north of the shaft, the lode is 3 ft. wide, chiefly composed of capel, with some ore; in the same level south the lode is 2 ft. wide, composed of mundic and spar, poor at present. In the 145 end the lode is 1 ft. wide, composed of capel and strings of ore, but not rich for the latter. In the 135 fm. level the lode is 4 ft. wide, composed of can and ore—saving work of coarse quality. We have suspended the 115 for the present. At the north mine, the lode in the 70 end north is 2½ ft. wide, composed of can and ore—work of a coarse quality; in the same level south the lode is 9 in. wide, composed of peach and ore, rich in quality. We set three new pitches in the backs of these levels on Saturday, the 29th inst. The lode in the winze, on the east branch, continues rich. We hope to sample on Friday, the 4th Feb., about 90 tons of rich silver-lead ores.—Jan. 31.

TINCROFT.—The 142 fm. level east, on Highburrow lode, is now home to a small cross-course, which I expect will heave the lode north a few feet, as in the level beyond this we expect a better lode and softer ground. In the 120 (where we are opening a plat at Martin's east shaft), we have discovered a good branch of copper ore—this appears to be a part of Martin's lode, which separated from the part on which the shaft was sunk near 20 fms. above, and is now got back again—so far it demands attention, and we are led to hope we shall get a pretty deal of ores from it. The stopes in the back of the 120, and bottom of the 110, are producing good work for tin; the pitches on this (Highburrow lode) continue to yield fair quality tinstuff. The 90 end west, on Chapple's lode, is producing some good quality ore; the tributers in the back of this level, working at 4s. and 6s. 8d. tribute, are making fair wages. The lode in the winze, sinking below the 72, has improved very much since my last report. I can speak of no particular alteration in the north mine, nor at Palmer's, since my last. We have this day sold 24 tons 19 cwts. 2 qrs. 15 lbs. of black tin, to Messrs. Williams, Harvey, and Co., for 972*l.* 2s. 10d. (carriage included), which quantity but a few months since would fetch 1250*l.* (nearly.) At Wheal Providence, we have this day dropped a lift of pumps 11½ fms. below the 21 fm. level, and hope in a short time to be in fork at bottom. We have now two pitches on Druid lode, in the back and bottom of the 12 fm. level, one at 6s. 8d., the other at 10s.; hope to get more tribute ground in course of working in a short time.—Jan. 31.

TIN VALE.—With the greatest of pleasure, I have to inform you that all our underground works here are in a progressive manner, and I see no alteration in the appearance of the lode in the different levels—that is, in adits A and B—since my report last week. I have one thing to add, which ought not to be omitted—that is, I have this day set to E. Biven and T. Gregory, two able tinners, a tribute pitch on the north lode, west of the cross-cut, in adit A, at 5s. in 1*l.*, leaving a profit of 15s. in 1*l.* to the proprietors. Our surface works at this time are going on well, as the weather is a little more favourable, and I hope soon to complete the leat.—Feb. 2.

TRELEIGH CONSOLS.—The 120 cross-cut, north of Christoe's, is intended to cut the lode west of the cross-course or slide, but it is difficult to say the distance—we calculate from 12 to 14 fms. Sunk in the shaft 1 fm. 5 ft. 6 in. In the 110, east of Christoe's, the lode is 2 ft. wide, with occasional stones of ore, and a north underlie. The 100 south, east of ditto, is driving on the cross-course or slide to cut the lode we are driving on, in the 110 fm. level. In Garden's shaft, below the 100, the lode is 3 ft. wide, producing good stones of ore, and rather improving in appearance, now about 2 fms. below the 100 fm. level; in the 100, west of ditto, the lode is about 3 ft. wide, at present split into two branches, the south part of which is producing stones of ore; in the 100, east of ditto, the lode is 2½ ft. wide; this has much improved in appearance within the last few days, but little ore. In the 90, west of ditto, the lode is 15 in. wide, worth about 5*l.* per fm.; we have had repeated changes in this end for the last 2 or 3 weeks past, varying in value from 5*l.* to 8*l.*; in the winze, below the 90 west, the lode is 3½ ft. wide, worth about 5*l.* per fm.—sunk 3 fms. below the 90 fm. level. In the 80, west of ditto, the lode is 2 ft. wide, with stones of ore only—but rather kindly. In the 70, west of ditto, the lode is 14 in. wide—orey towards the bottom—I think likely to improve; in the rise, above the 70 west—holed. In the 60, west of ditto, the lode is 20 in. wide—very promising, with a branch of ore 4 in. wide, worth 4*l.* per fm. In the cross-cut north, at Wheal Parent, we have 2 fms. more to hole to the engine-shaft.—Jan. 28.

WEST WHEAL JEWEL.—In the 57 fm. level, east of Williams's cross-course, on Wheal Jewel lode, the lode is not taken down in the past week. In the 42 fm. level, east of little cross-course, on the south lode, the lode is 6 in. wide, unproductive. In the 20 fm. level, west of Quarry shaft, on Tolcarne tin lode, we have met with a slide, which has heaved the lode south; in the deep adit west, on the same lode, the lode is 1 ft. wide, worth 5*l.* per fm.; in the shallow adit, west of Quarry shaft, on the same lode, the lode is 2 ft. wide, looking more promising for tin than it has been for some weeks; in the stopes, in the bottom of the adit, east of Pryor's winze, on the same lode, the lode is 5 ft. wide, worth 30*l.* per fm. In the stopes, in the bottom of the 12 fm. level, west of Pryor's winze, on the same lode, the lode is 5 ft. wide, worth 25*l.* per fm.; in the stopes, in the bottom of the 12 fm. level, east of George's winze, on the same lode, the lode is 3 ft. wide, worth 12*l.* per fm.—Jan. 31.

WHEAL TRELAWNEY.—Phillips's shaft is sunk nearly to the 62 fm. level. We expect to divide and ease the shaft next week, and commence driving to the lode immediately after. The lode in the 52 north is large, and worth 7*l.* per fm.; in this level south the lode is worth 12*l.* per fm.; the stopes, in the back of this level, are much as usual. The lode in the 42 north is worth 7*l.* per fm.; the stopes, in the back of this level, are producing a fair quantity of ore. The lode in the 32 north is a little improved, worth 7*l.* per fm.; the stopes, in the back of this level, are looking better than I have seen them for some time past. The ground in Trelawney shaft is still rather hard, but we expect a change for the better shortly. The 22 cross-cut east is without much alteration. The lode in the 30 fm. level, north of Vivian's shaft, is looking well. We have commenced driving a cross-cut from the lode in this level, near Trehane boundary, to hold to Vivian's shaft, which is sunk about the depth of the present level. We shall sample to-day a parcel of ore, computed 30 tons.—Feb. 1.

WHEAL ADAMS.—The ground in the 50 fm. level has been favourable for rising, and we expect to communicate to the winze, sunk from the 40 fm. level, to-morrow; the lode has been left standing in the rise, for the purpose of saving timber, and, subsequently, removing the ore as free from the contiguous rocks as possible; we have, however, cut into it about 7 ft. above the back of the level, where it is 2 ft. wide—a good lode; the orey part, which is worth 12*l.* per fm., appears to be extending north behind the old level, which will be proved in the course of the ensuing week. We have done but little in the 18 fm. level cross-cut during the past week for want of air, which is now supplied, and the operations will be forthwith resumed; while this place remained idle, we were engaged in removing attle in another part of the level, and have laid open more tribute ground. Other places are without any material alteration.—Feb. 1.

WHEAL MARY ANN.—The lode in the 40 fm. level, south of the boundary, is 1 ft. wide, worth 4*l.* per fm. The lode in the 30 fm. level, south of Barratt's shaft, is 2½ ft. wide, worth 14*l.* per fm. The winze, sinking under the 15 fm. level, south of Barratt's, has been suspended since the last report, on account of an increase of water, and which we are now boring to hold to the 30 fm. level; in the bottom of this winze the lode is 2 ft. wide, worth 20*l.* per fm. The lode in the 15 fm. level, south of Pollard's shaft, is similar to my last report. Pollard's shaft is sunk 14 fms. under the 15 fm. level, from where we shall drive to intersect the lode, and which we hope to accomplish in the course of two or three weeks. The stopes are producing a fair quantity of lead. On Wednesday last we sold two parcels of ore, amounting to 785*l.*—Feb. 1.

FOREIGN MINES.

BOLANOS MINES.—*Mine Report, dated December 2, received January 31.*

EL BOTE.—I had last the honour of addressing you on the Nov. 18, since which I beg to inform you, that the plat for the Victoria cross-cut, at San Genaro, has been commenced driving. We have also again commenced sinking the shaft in the San José cross-cut, and the driving goes on regularly, and no further discovery has been made. In the cross-cut, de la Compania, the quantity of water we have met with has made the ground more difficult for driving; consequently, our progress has not been equal to the previous month. In Guadalupe east, the vein continues about 1½ vara wide, and but little or no impediment has taken place since I last addressed you. In the cross-cut south, in this level, no further discovery has been made, and it has, in consequence, been stopped. In pozo No. 1, and the other workings in this level, nothing has been done, owing to their being full of water. The level east from Poza de Guia continues in good ore, and also in the level south towards Providencia the vein has somewhat improved. The cargo, extracted during the month, has been principally from planes No. 1 and 2, and the Pozo de Guia, in which the vein is very large and good. The rise in the back of Frente Alta de San Antonio has again improved, and we are now raising some good ore from this point. In the cross-cut of Esperanza, we are still driving through vein stone, but without fruit. In the adit of Valenciana a rise has been commenced, to communicate with an old cata, for ventilation.

Extract from a Letter dated December 2, received January 31, per Teviot.

On account of the new arrangement, by which the packet leaves this coast earlier than formerly, I am obliged to send my dispatches on the 3d, allowing short time for making up the monthly accounts and reports. Since my last respects of the 18th November, little of interest has occurred. The mines continue in a very discouraging state. In Celestina, the end of Providencia has produced small quantities of ore, of good quality, and differing somewhat in character from that which it has yielded hitherto. This, at present, is the only favourable indication in the mine. In the course of this week, it is probable the Celestina vein will be cut in the cross-cut, and next month's report will inform you of the result. In the Guadalupe end, the ore, though more abundant than heretofore, is still of low ley: but I think it would not be prudent to stop this work yet, as formerly there was no trace of ore in this level, and its quality may improve. In San Francisco de Paula, the tutworks have discovered nothing; these are reduced now to three, of which the east end of La Piedad will be stopped, if it shows no improvement shortly. The fourth and fifth cross-cuts I should prefer continuing yet a few weeks. It would appear, that the vein stuff, found in sinking the last few vans of the shaft, must have belonged to the first and second vein (Bonifacio and Piedad), which were so much broken up, in the fourth cross-cut, as not to be recognised.

P.S.—*December 3.*—I have just been advised, that a string of good ore, about 2 inches wide, accompanied by 6 inches of lead and blende, has been cut in the fifth cross-cut in San Francisco de Paula. The end of Providencia, in Celestina, has improved; but nothing has been yet discovered in the cross-cut to the Celestina lode.

Extract from a Letter dated December 3.

I have now to acknowledge the receipt of your letter of the 1st October, having taken due notice of its contents. The alteration in the sailing of the packet, I fear, will, at times, impede the sending of the monthly accounts by it, as we are obliged to write here the latest on the 4th of every month, so that our letters may reach Mexico in time for the express. I now beg to enclose the accounts and statements of last month, which I trust you will find correct. The result of them is not so good as I would wish. However, notwithstanding the heavy expense of drainage, both on the surface and underground, and the costs in San Genaro, the ores extracted this month will fully cover all expenses. The average ley per assay of the ores in the Patio Senores, at the end of October, was 5·44 per monton, whilst on the 27th November, it came to 7·90 marcs per monton; and, from the present aspect of the points in which we are working, there is every reason to believe, that these good leys will continue. The winter has set in with great force, and, I fear, will throw us back in the beneficio, and in the surface works. A very heavy snow-storm fell on the night of the 1st. The extraction of ores has continued from the same points mentioned in my last. In San Antonio there has been an improvement. The water in the planes is kept down easily, but we cannot augment the extraction, as the whims are nearly all occupied in keeping the water down in the shaft. In the east end of Guadalupe, no improvement has taken place since I last had the honour of addressing you. The progress of that important working, the Compania cross-cut, has no been so good, on account of the large quantity of water met with in the last fortnight; however, the ground is good for driving, and, when once through the present veneros, I hope we shall not be long before the vein is cut.

COPIAPO MINES.—Dispatches have been received from Copiapo, dated 29th Nov. enclosing the mine reports for the month of October, of which the following is a copy:—

San Pedro Mine.—Since last reported on, the stopes below the 24 fm. level, west of shaft, have become poor: we have taken out all the ore from that part of the mine that would pay for extraction, the vein having in depth become narrow, and the ore of an inferior quality. I removed the men from there, to take away an arch of orey ground, at the eastern part of the mine, below the 24 fm. level, where they have a good branch of ore to work on, which will give about 3 tons per fm. The stopes between the 15 and 24 fm. levels, west of shaft, still yield a pretty deal of rich ore. No alteration for the better in the 15 fm. end, west of shaft, since reported on last. The winze sinking on the north lode is poor—ground hard. There is a good branch of ore in the chiflon sinking at the end of the above-named winze: should it continue, it will soon open good tribute ground, as the ore is of a superior quality. We occasionally meet with small branches of rich ore in both ends, driving on same lode, but as yet have not opened any ground that will pay for stoping. Having advised you, that we did in September finish two of our best pitches, between the 15 and 24 fm. levels, will account for the falling off in the produce for last month.

Checo Mine.—The little new shaft is down 25½ varas, and it is deep enough to communicate with St. George's end. I have set the cross-cut at 28 per vara, and we have about 10 varas to drive to cut the lode, which will take two months, unless the ground becomes softer. Chappel's stopes are still holding good, and the end before them is holed to Harman's shaft. The branch became poor, about 6 feet before we holed. I shall put the men to sink a chiflon on the best part he has driven over, and shall have to sink about 12 varas to hole on an old working. In J. Beltran's chiflon, the branch is very rich, but not wide. In Rosewarne's pitch, the lode is more than 2 fms. in width, and very coarse; and, what is against us, we are obliged to send all the stuff to the surface, there being no attle room in the pitch. On the whole, Checo is looking just the same as when last reported.

Copper ore raised at Checo for October, 32 tons, of a superior quality; ditto, San Pedro, 47 tons—total, 79 tons.

Silver ore raised at Pampa Larga Mine, about 7 tons.

The company had about 600 tons of copper ore on the beach at Copiapo ready for shipment. The *Michael Williams* had not arrived out to load a cargo or ore.

IMPERIAL BRAZILIAN MINES.—*Gongo Soco, Nov 13.*—At Bananal, we hope to complete about 100 fms. of the lower part of the new deep adit, and to open it as far up as Walker's new wheel-pit and Walker's shaft, and we hope to prosecute this, the remaining part of the deep adit, with vigour. Our ventilation has been rather imperfect in the adit, but not so much as to cause any interruption, or to render machinery necessary for supplying air. The water-wheel, for working the saw-mill, will be in its place before I again have this honour; and the preparations for Walker's new wheel are in a forward state. The captain's watch-room, and the washing-house, are roofed, and the greater part of the store-room has also been covered. A few heavy showers—the forerunners of the rains—have enabled us to set our pumps again at work on the mine; if the surface water continues, we shall have it drained during the ensuing week; if, however, a few dry days again diminish it, we shall still continue pumping, in order to drain the wet ground in Walker's shaft. I believe there is not the slightest doubt, but that we shall again resume taking out gold during the present month.

Nov. 23.—At Bananal, we have now quite sufficient surface water to work all our machinery—the mine has, therefore, been entirely drained; owing, however, to the workings having been so long full of water, the whole country near it has become saturated, and this water, together with the rain beginning to percolate downwards, gives us quite as much work as our present machinery can manage. Our deepest lift of pumps is as long as it can be prudently made; but though it might perchance be possible for us to add another, and to commence sinking on the gold vein, the water on the mine, and our pumping power, would so very nearly balance each other, that not one day would pass without several interruptions—in the meantime, also, if we were to confine ourselves to this object (and we have not power enough to follow any second research in this important place), all the levels necessary for making a communication between the auriferous part, and our new engine-shaft, in which the large pumps are to be placed, must be delayed; we have, therefore, after the most careful deliberation, determined not to attempt sinking for the present, but to drive from the bottom of Thomas's shaft towards Walker's (new) engine-shaft—so as to open this thoroughfare as soon as possible. We may, perhaps, be now and then able to take out a pound or two of gold; and as we shall drive on the course of the jacotinga, we are not without sanguine hopes of intersecting other gold veins in our progress. No regular gold returns can, however, be depended on for some to come. Only 4 or 5 fathoms of ground remain unpierced, in order to open the new adit from its commencement to Walker's new wheel-pit; and this will be done during the present week. The ground towards the mine in this portion of the adit is at present hard; but in the adit shaft, between this end and the mine, it is most favourable. Walker's shaft has been drained, and the new adit level from it is again in course of extension towards its mouth. The saw-mills' water-wheel is in its place, the captain's room and washing-house are in rapid progress, and every other part of your service is prosecuted with the utmost vigour.—Gold workings, from the 1st to 23d November, 7 lbs. 11 ozs. 12 dwts.

ST. JOHN DEL REY MINES.—*Morro Velho, Nov. 8.*—Produce for Oct., 15,512 oits. =149·022 lbs. troy, from 3707·2 tons of ore=4·18 oits. per ton.

This is an excellent produce, though not equal to what might have been expected, looking at the quantity of stone stamped, as well as at the high yielding of the stone in the month of September; but I believe the value of 4·18 oits. per ton, obtained in this last month, is more to be depended on, even after moderate picking, than that obtained in September, which must have been owing to some fortuitous circumstances, hitherto unexplained. We acturily sent 3618 tons of stone to the stamps; but Mr. Smyth says, that only 3707 tons were stamped—the balance remaining in the stamps passes for November. This great augmentation of quantity has been arrived at, partly through the arrangement alluded to in my letter of October 28, and partly through the important addition I have had made to the spalling-floor, and to the tram-roads underneath it, without which it would have been useless to have increased to the extent—we have done our force of spallers, as they could not on the old floor have had room to work, or to tram away the broken ore, if they had worked.

Cost for October, rs. 27,280 973, at 27½	£3096 18 8
Produce, 15,512 oitavas; less duties, 7 per cent., 1086—net oitavas, 14,426, at 7s. 6d.	5409 18 0
Profit	£2312 16 4

In the cost, you will find included, under the head of "salaries to officers," 100*l.*, which I have presented to Capt. Treloar under the special permission for that purpose given to me, and forming part of my instructions on leaving England; and I have much pleasure in assuring you, that Capt. Treloar's untiring assiduity, his energy under the most trying circumstances, and the zeal with which he has uniformly seconded all my efforts at improvements, have richly merited this mark of the board's satisfaction. It is much owing to his aid that, for the last months—say, July, August, September, and October—I have enabled to raise the produce to an average of 15,431 oits., yielding an average profit of 2172*l.* 7s. 1d. per month. In October cost, the crank and iron figure for nearly rs. 3000—being principally for the new pumping-wheel; and, as none of these items are likely to recur shortly, I anticipate a diminished cost for November.

New Works.—The new pumping-engine is completed and at full work in the Bahu and Gamba Mines; she is a powerful machine, and seems to do her work with the greatest ease; the total length of the rods to connect the wheel with the three mines, will, when the connection with the Cachoeira is completed, amount to 388 fms. The Cachoeira pit-work and the rods, &c., to connect it with the pumping-engine, are in active preparation. The new stamps are at length in hand, though I have not been able to put as many as mechanics on them as I wish, and intend to do—still I hope they will be finished by June next, if not before. The new axle for the Herring tamps is likewise in hand. The new spalling floor, or rather the extension of the old one, is at length completed—this has been a heavy undertaking; but without it, it would have been impossible to have increased our rate of stamping as we have done. The inclined plane for Goyen's carriages, will be taken in hand again the moment a carpenter can be detached for that purpose. The mines are getting rapidly into excellent order. Since the Gamba and the Bahu pit-work have been put down, sinking has been resumed with spirit, and good progress made last month in all the three mines, as you will see detailed in Captain Treloar's monthly report. We have 44 of our best men constantly sinking—viz.: 20 in the Bahu sump; 12 Gamba; 12 Cachoeira.

Nov. 18.—*New Stamps.*—Eight months for completing these new stamps, does, doubtless, appear very long; and could we devote the whole, or the larger part, of our mechanics to the task, it would be got through in a much shorter time; but you will have already seen, by my correspondence, the enormous difficulty we experience in obtaining native mechanics, to meet the pressure of the numerous works now in progress. It is true, and you justly remark, that we possess a large force of mechanics; but to give you an idea how this force is divided, and subdivided, to meet the numerous calls upon it. I enclose you one of the weekly returns, which I make John Rouse furnish me every Monday, of the distribution of his force on that day. You will there see I had then been enabled to assign to the stamps. This force will, however, be gradually increased, as other jobs are completed. On Monday, I expect the carpenters will be increased to six, and by the beginning of January, I hope to have a respectable force, of every description, on the works.

Force.—To supply 95 stamp-heads, which, I trust, will be at work in June, we shall require 250 borers, equal to an augmentation of 120 men, on the mines.

Produce.—It is true, that neither Capt. Treloar, nor Mr. Smyth, contemplated the possibility of any considerable increase of produce, until after the augmentation of our stamping and manual force; and, undoubtedly, they would have been right, had the old system of spalling and stamping been continued; and Mr. Smyth declared it was impossible the stamps could pass more than 3400 tons; but, fortunately, by adopting the measures explained to the board, in my letters of the 25th Oct. and 8th inst., I have succeeded in gradually rendering, not only the spalling-floor, but the stamping-power, more efficient, as the board will see, by the following comparative statement of the work done in the five months, since the commencement of my superintendence, and the five months immediately preceding the same:—

1847.	Stamped. Tons	Produce. Oits.	1847.	Stamped. Tons.	Produce. Oits.
January	3074	12,782	June	3336	13,891
February	2828	12,246	July	3533	14,894
March	3118	12,679	August	3586	15,365
April	3005	13,093	September	3324	15,953
May	3918	13,403	October	3707	15,512
Total	14,940	64,203	Total	17,486	75,615

Increase in the five months..... 2546 tons, 11,412 oits.

Gold extracted to date, 4967 oits., from 283·03 cubic feet of sand=20·86 oits. per cubic foot—this extract has somewhat disappointed my expectations, being much inferior to what we have had to the same period of the four months immediately preceding. The reduction officer says, in explanation, that the stone for the first 11 days of the month was unusually bad. Capt. Treloar says there certainly was a small quantity of inferior stone from the Bahu sump; but by far the larger proportion of the ore furnished up to that date was of excellent quality; and as this month the picking on the spalling-floor is carried on to a greater extent than it has been for many months past, and the quantity sent to the stamps greater than ever it was before in the same period, we might have hoped for a better result. The two succeeding burnings off may, however, yet compensate for the apparent falling off in the first. Stamps working during 18 days, 68 heads—supply of stone abundant.

Nov. 27.—Gold extracted to date, 9386 oits., from 465·38 cubic ft. of sand = 20·17 oits. per cubic foot. Stamps working during 27 days, 68·28 heads. The supply of stone was abundant, and picking going on with spirit, though, I am sorry to say, without producing hitherto as good result as for several months past we have been accustomed to see up to the same period of the month.—[The continuation of this report will appear in our Journal of next Saturday].

ACCIDENTS.

Blower's Green Colliery, Dudley.—J. Vickers was killed by a fall of a quantity of coal.

Rose Bridge Colliery, Wigan.—On Thursday week, a portion of the roof of this colliery fell in, and buried two youths about 15 years of age, one of whom, when the rubbish had been cleared, was found to be quite dead, and the other so seriously injured, that but faint hopes are entertained of his recovery.

Cwmavon Works.—On Thursday week a poor man, named Rees Jones, was killed at these works, in consequence of having fallen into a coal-pit, about 100 yards deep.

Fatal Accident.—As many of the Penydarran workpeople were coming in the trams, on Friday evening, the 28th ult., from the top of the incline to the yard, the chain, owing to the severe frost having made it brittle, broke, and the parties were precipitated in all directions. William Foster, a married man, with two children, and his wife, an invalid with rheumatism, and on the eve of her confinement, was killed on the spot, and many others were severely injured.—*Swansea Herald.*

A Young Woman Killed by falling down a Coal Pit.—An inquest was held on Tuesday, the 25th Jan., on the body of a woman named Elizabeth Wootton, at the Royal Oak public-house, Portobello. It appeared, that the deceased, on the previous day, was working for her father, who is a butty collier, at the Bull Pleck Coal Pit, and when engaged, in company with another girl, in pushing off the skip, she overbalanced herself, and was precipitated to the bottom of the shaft, and dashed to pieces. The poor girl, in the act of falling, laid hold of her companion's dress, in order to save herself, and the latter was obliged to shake her off for her own preservation, otherwise she would have shared a similar horrible fate. These accidents, so frightful to contemplate, are of common occurrence in the mining districts; but the greater portion arises from the wilful neglect to secure the openings of the worked-out pits.—*Birmingham Journal.*

Wheal Tremayne.—An inquest was held, on Friday week, at Crowan, on Wm. Lean, a whim lander at Wheal Tremayne, Gwinear. On the 20th ult., while adjusting the whim-chain, prior to working the whim, the weight of the kibble, suspended to the chain, caused the slack of the latter to run suddenly into the shaft, giving the deceased a blow on his head, and fracturing his skull, from the effects of which he died.

West Bromwich.—W. Griffin was killed by a fall of coal at Messrs. Bagnall's colliery. J. Sheldon was also killed by a fall of coal, while working in one of Messrs. Halford's pits.

On Friday, the 28th January, a fatal accident befel a man named Samuel Launt, of Bolehill, near Wirksworth, aged 35 years. He was descending a mine, when a stone fell down the shaft after him, struck him on the head, and caused his death in a short time. The miners' jury, called the "twenty-four," sat over his body on Monday last, and returned a verdict of accidental death.—*Derby Reporter.*

An accident happened at Hady ironstone pits, on Monday last, to a man named Longden. Whilst he was working at the bottom, a quantity of bind fell upon him, and injured him severely on the head and other parts of his body.

— On the following day, an accident happened at the same pits to Joseph Ward, of Brambton. It appears that he was working at the bottom of a shaft at the time when a corf was being drawn up; the corf was safely landed at the top, but the horse at the gin unfortunately backed too soon, and it was overturned; the ironstone was thrown down the shaft, and a portion of it fell upon Ward, breaking his leg, and otherwise injuring him.—*Ibid.*

Tipton.—Thomas Rowley, aged 10 years, went down one of the pits belonging to Messrs. Haines, taking a lighted candle into the works before the safety-lamp had been applied—the consequence was, that an explosion occurred, and deceased was so dreadfully burnt that he was compelled to be conveyed home, where he lingered until Monday week, when he expired. It appeared that the explosion originated from the want of proper caution on the part of deceased.

Staveley Works.—George Walker, had ascended the shaft with a fellow workman, when, in attempting to get out of the corf, his foot slipped, and he fell to the bottom of the pit, a distance of upwards of 30 yards, and was killed on the spot.

FOURDRINIER'S APPARATUS FOR PREVENTING ACCIDENTS IN MINES.—We are glad to hear that the patentees of this ingenious and useful invention have met with considerable success in their endeavours to introduce it in the north; we are informed, that they have arranged with three of the largest proprietors, each to take one on trial; and, on exhibiting the model, at the Central Exchange, Newcastle-on-Tyne, on Saturday last, the utmost satisfaction was expressed by all who witnessed it.

THE OAKS COLLIERY EXPLOSION.—Our readers will no doubt remember that a dreadful explosion took place at Oaks Colliery, on the 5th of March last, when 73 persons unfortunately lost their lives. At that time a subscription was opened for the purpose of alleviating the distress of the widows, orphans, and friends of the deceased. A meeting of the contributors, and recipients of the fund, was recently held in the Court-house, Barnsley, for the purpose of auditing the accounts, and laying a statement before the meeting: 34 widows and 57 orphans were present, and their appearance was very creditable, and excited much sympathy. They were provided with an excellent dinner, during which the ladies present acted as waiters and nurses to the children. By the account of the funds, it appears that the subscriptions amount to 2010*l.*, of which 1982*l.* 14s. 9d. have been collected. The disbursements are, to the objects of this charity, 375*l.* 1s. 2d.; for stationery, printing, and lithographing, 9*l.* 17s.; investment with the Midland Railway Company on debenture, bearing interest at 5 per cent., 1200*l.*—balance in hand of Barnsley Banking Company, 397*l.* 11s. 7d.

THE INUNDATED COAL MINES.—The progress of pumping is going on satisfactorily, and many of the proprietors are making preparations to commence working their upper mines. At the Patricroft Colliery they have reduced the water to within about 2 yards of the "four feet mine."

SILVER VALLEY MINING COMPANY.

A special general meeting of shareholders was held at the offices, Finsbury-square, on Wednesday, the 2d inst.

RICHARD HODGSON, Esq., in the chair.

The circular convening the meeting having been read, the following report from the directors was presented:—

DIRECTORS' REPORT.

The directors have called you together in order to hear the reports which will presently be read to you, and to take your opinion, whether, upon hearing those reports, you would desire to continue the operations of the mine. They directed Capt. Williams, of Drake Walls Mine, to inspect the mine; and his report, with that of Capt. Eddy, your resident agent, will be read, together with a report of Mr. P. N. Johnson, which latter will give a general view of the mine.

CAPT. WILLIAMS'S REPORT.

Drake Walls, Jan. 29.—At Mr. Johnson's request, I have inspected Silver Valley Mine, and find, since my last visit, the lode in the 50 west has improved both in character and size; it is now about 2 ft. wide, producing a little tin, and, on the whole, it is rather a kindly lode. I still recommend driving this end about 7 fms. further, which will bring it to the junction of the two lodes, or branches, going west, and under the winze, now sinking below the 30, where there is a very promising lode going down. This winze has been sunk about 7 fms. below the 30, and has improved in depth; the ground at each end of the winze would work at 9s. or 10s. tribute, with the present very low price of tin; and I think you have a fair chance, and may reasonably expect an improvement in the 50, when it arrives at the point referred to; and, if so, you will then have an immense piece of ground laid open; and should the price of tin again advance, I have no doubt of its being profitable ground; while, in the event of the trial proving a failure, the expense will be trifling. There is another small trial which I strongly recommend—that is, to drive south (say) 10 or 12 ft. at the eastern extremity of the 50. I am of opinion that the main part of the lode has not been seen at this point. These trials recommended would cost (say) 70*l.*, which I think very desirable to be done; and, if no improvement then, I could not recommend your going any further.

CAPTAIN EDDY'S REPORT.

Silver Valley Mines, Jan. 26.—I beg to hand you an account of the work done in these mines from June to Dec., 1847; also to submit my opinion of the present appearance and future operations. Cut shaft-plat in the 50 fm. level, broken for kibble and cistern-plat, eased down the shaft from the 40 to the 50 fm. level, put in footway, penthouse shaft, pieces sollar, &c.; sunk the engine-shaft, below the 50 fm. level, 1 fm. 4 ft.; drove the 50 fm. level cross-cut, north to the lode, 3 fms. 4 ft. 3 in.; drove the 50 fm. level, on course of the lode, 8 fms. 2 ft. 6 in. east; drove the 50 fm. level, on course of the lode, 10 fms. 5 ft. 10 in. west; drove the 50 fm. level cross-cut north 1 fm. 0 ft. 9 in. west; drove the 50 fm. level south 2 fms. 4 ft. 2 in. east; sunk the 20 fm. level bottom 5 fms. 5 ft. 6 in. west; sunk the 30 fm. level bottom 3 fms. west; sunk the adit level, north of T lode, 4 ft.

Silver Lode.—Drove the 20 fm. level, on course of lode, 21 fms. 3 ft. 4 in.; rose ditto, in back, 10 fms.; stoped ditto, bottom and back, 10 fms.; drove ditto, cross-cut north, 2 fms. Drove the 20 fm. level, on course of lode, 20 fms. 2 ft. 7 in.; sunk ditto, winze, 9 fms. 2 ft. 6 in.; rose ditto, back, 15 fms. 1 ft. 6 in.; drove ditto, back, 4 fms.; stoped ditto, bottom and back, 20 fms.

Wheal Brothers.—Cleared and secured the deep adit level 20 fms. west; drove the adit level, on course of lode, 1 fm. 1 ft. 2 in.; rose back of adit 16 fms. 2 ft. 3 in. against Oak shaft.

Oak Shaft.—Erected derry, hauled out water, and secured the shaft; cleared shaft of attle, 2 fms. 2 ft.; sunk shaft on lode, 4 fms. 0 ft. 9 in.; drove the 10 fm. level, west on lode, 2 fms.; drove ditto east, 1 fm. 4 ft.; rose and sunk on course of common adit level, 2 fms. 3 ft. We have sold, since June, 23 tons 15 cwts. of tin, which has realised 804*l.* 13s. 5d.; left allowances, 9*l.* 17s. 4d. = 794*l.* 16s. 1d.—Also 9 tons 12 cwts. 1 qr. of silver ores, amounting to 205*l.* 10s. 3d.; parcels sold 31st July, 99*l.* 4s. 6d. = 304*l.* 14s. 9d.—Also 9 tons 5 cwts. of arsenic, 32*l.* 6s. 9d. We have 3 tons of tin to add to this quantity, which would have been sold but for the severe frost, which has impeded our progress in dressing it. We have also about 10*l.* worth of silver ore, and 10*l.* worth of arsenic on the mine.

Silver-Lead.—Regarding the present appearances of this lode, the ground, which has been opened on it, and the small returns which have been made, I am of opinion, that it will not remunerate for the outlays required to work it in a mining systematic manner—such as sinking of shafts, driving level after level, &c., especially where the expenses of machinery are incurred. Notwithstanding this lode is a continuation of Wheal Brothers lode, it does not consist of such large quantities of its most agreeable feature for silver—such as the carbonate of iron in leaders, of which such large masses of the grey and native silver were found. The principal part of the lode, in this part of the mine, consists of flookan, sometimes accompanied with soft peach and spar, and being impregnated with mundic; but the general property of iron is not found so plentiful, nor so regular, in the lode—the chiefest part of the silver, which we have found, is the sulphuret of silver, combined with the sulphuret of lead, and being deposited in small branches in the flookan at the point where the branches unite. In the 20, we have found a little grey and native silver; the lode now in the stopes, west of the winze, at the junction, is 14 in. wide, having a small branch of carbonate of iron and sulphuret of mundic on the hanging wall, and still produces small portions of grey and native ores; the stope, in the back of this level, produces small portions of inferior work. I have been through the levels in the mine, taken samples, and assayed them from the kindliest places in the lode, but find them to be poor. Should you continue your operations, I should recommend you to put a few rises more through the ground, as in some places 20 or 30 fms. have been driven, where the lode has only been seen in the level from the 20 to Callington C adit especially—average price for rising, throughout the mine, is about 14s. per fm.; and a great quantity of the stuff might be left in the levels. From what I have seen of the lode in Wheal Sisters, and from the reports which I have heard, if the ground, east of our boundary, could be obtained, I think it a good speculation to extend the both adit levels east, and put rises through the ground—there we found the silver, of the grey native character, in the carbonate of iron. A rise or two might also be put up in the back of Wheal Brothers deep ad it west, as there is but one for 50 fms. behind the end.

Tin Lode.—With respect to this lode, as also the silver lode, I wish I could give you a more cheering report, in consequence of the inferior quality of the tin, and the low price now giving. We have taken away the principal part of the ground in the upper levels, which will work at tribute, and leave any profits to the adventurers. During the last six months, our operations have been in sinking the shaft, and driving east and west, endeavouring to see the intersection of branches under the south underlaying vein in the 40. When we cut the south branch in the 5*o*, in the cross-cut north, we found it to be poor, and extended the cross-cut north 10 ft.—cut north branch, which we found contained a leader of good tinny stuff, 10 in. wide; this continued for 4 fms. east and west. The back has been worked a little by the tributers, but the branch of tin declined in going up; the bottom has not been worked, in consequence of the water. In resuming the end east, we found the lode increased in size by a disordered cpad, and was given to fear this was the south branch, which was made an angle, and hoved round towards it, as we also supposed it did in the 40—at the same time, we found this branch also became disordered in going west; drove on angle, as you perceive by the sketch, towards the south branch; taking the bearing of this branch, going east, in dead ground, it strikes 3 fathoms south of the north one, in the eastern end. We have driven south 3 fathoms I foot, but have cut nothing which can be called a lode; taking the courses of the north and south branches, in going west, they should unite about 7 fathoms beyond the present end, just where the winze is now sinking from the 30 fathom level. The lode in the winze is 3 ft. wide, containing a sufficient quantity of tin, as to work at 11s. in the 1*l.* tribute; we have sunk through 6 fms. of this ground. The lode in the 50 end west is 20 in. wide, contains spots of tin, but not enough to pay for working; the ground at tribute, taking into consideration the horse of killas, is becoming smaller in going down, and the two branches being approximating in going west, my views of the prospects on this lode are, that should the lode prove productive at the junction, we should have 20 fms. of tribute back in going west, and that the tin in all probability would dip east on the junction in going down, as the horse of killas wears out.

MR. JOHNSON'S REPORT.

London, Jan. 29.—I visited the mine, and consulted with your agent, Capt. Eddy, on Tuesday last, and much regret to say, that I find the prospects such as to require your consideration as to the propriety of further prosecution. You are aware that the object, in setting this mine to work, was twofold—first, to effectually try a tin lode, which had been partially worked by former parties, and given up for want of funds; and, secondly, to take advantage of the economy of the steam power, erected for this purpose, to try a silver lode, which, from its peculiar locality, was expected to be productive. The gross amount of tin sold since the commencement of operations in April, 1845, and of silver ore, is respectively—tin, 1436*l.* 5s. 9d.; silver, 542*l.* 6s. 11d. The character of the tin lode on the upper levels were such as to hope for better results in depth, being large, and no part without tin, which, it was hoped, would concentrate and become more solid and productive, both at the junction of a cunning lode, containing iron pyrites, blende, and spots of copper and lead, which, it was considered by all agents who examined it, would have acted as a feeder and mineraliser, and also in depth, where a more congenial and softer strata of ground existed. The cunning lode referred to did act as expected at the immediate junction, producing fine stones of tin; but a very short distance away from the junction no effect was perceptible, and the softer work in the 50 fm. level did not render the tin lode more productive. I consider there is only one chance left of any improvement, which is the junction of two branches of the lode some distance westward; but as these branches are so nearly similar in their character, and the expense would be great, considering water charge for such trifling operations and chances of success, and the unproductive state of the lode at present, I cannot recommend much further outlay. The silver lode I consider to have had a fair trial in the 10, 20, and 30 fm. levels, under which, in this district, silver ore is seldom found, neither can I see any indications to justify further prosecution in depth. The silver is found in several states of mineralisation, as native, sulphuret, ruby, and associated with galena, and those states appear to depend on the contiguity of a branch of carbonate of iron, which forms a leader to the lode, and to the more or less decomposed rock in which the lode exist, as well as occasional veins of quartz and spar; there is, however, nothing continuous—and although, as we have several times found it to be the case, we may meet with small bunches of great richness, I consider that the amount of silver extracted has not been, and is not likely to be, more than about half pay for the expense of extraction and dressing. I must beg to assure you, that every care has been taken in the prosecution of this unfortunate speculation, and that the expenditure has been strictly confined to the development of underground operations, with the exception of water-wheel stamps and a few inexpensive sheds to return the tin and silver ore produced. I must conclude by saying, I consider the mines have been fairly tried, and must leave for your consideration the propriety of further prosecution.

CAPT. EDDY'S REPORT.

Silver Valley Mines, Feb. 1.—I beg to say that, since I have been in these mines, the principal object which I considered worthy of aiming at was, to see the tin lode at a greater depth under where it has been productive in the upper levels. During this important crisis of time, respecting the abandoning or further prosecution of the mine, with all due regard to the interest of the company, as you have gone to the expense of sinking the shaft and driving the level within 8 fms. of the object, I cannot feel justified, as your agent, whether the lode be found improved or not, without recommending you to drive the 50 end 7 fms. beyond where it now is—that, as I have before stated, should we find the lode improved there, where the junction should take place, we should not only have tribute ground going west, but I consider the tin would again dip east under the junction as the horse of killas wears out. There are several mines in the county of Cornwall, which I could mention, which became productive entirely by such an occurrence; the winze I should recommend you to suspend till the result is seen in the 50. I have spoken to the man't its morning who work them, who told me they would take both the ends at 10s. tribute. Taking into account these eight men on tribute, and eight besides, which we now have, with the tin already on the mine, I think we can arrive at the object without incurring additional expense to the company, by taking off the silver department, and by advising us, that we may manage accordingly—such as by working up the materials on the mine, driving with two enginemen, &c. Should this, after all, prove a failure, the affairs could then be wound up with greater satisfaction, and without the prospect for any other company to succeed and reap the benefits of our labour.

Statement of Accounts for Eight Months ending November, 1847:—

EXPENDITURE.				RECEIPTS.			
Amount of cost from April to November, 1847	£ 2710	13	6	Received on 3d instalment	£ 70	0	0
Interest	23	10	5	Ditto 4th ditto	1957	0	0
Directors' attendances,	100	0	0	Ditto 5th ditto	460	0	0
London management	100	0	0	Tin sold	749	15	1
Auditing two years	8	8	0	Silver ditto	304	14	9
Petty cash	12	13	1	Arsenic ditto	32	6	9
Balance from last annual account	1676	10	11	Balance	1013	5	10
	£ 4633	3	5		£ 4633	3	5

It was resolved, that the tutwork operations be confined to driving the 50 fm. level west, and setting such ground on tribute as can be done to advantage; also, that a meeting be held on the 3d March, to take into consideration the abandonment of the mine.

Thanks having been voted to the chairman and directors, the meeting adjourned.

PLYMOUTH WHEAL YEOLAND MINING COMPANY.

At a meeting of adventurers, held at the office, Whimple-street, Plymouth, on the 28th January, the accounts were presented, showing balance in favour of the mine, 104*l.* 6s. 7d. The calls in arrear amount to 23*l.* 10s.; the tin sold in November produced 88*l.* 1s. 3d.; in December, 66*l.* 13s. 7d. The following report from Capt. R. Edwards was read to the meeting:—"Since your last general meeting, the north adit has been driven from 10 to 11 fathoms, the lode throughout the greater part of which has been disordered, and still continues so. The south adit has been driven about 14 fathoms, and I am now expecting daily to cut the old south lode; as soon as this is accomplished, we shall commence driving on it; at the same time, I propose to continue the driving of the cross-cut, to intersect the new south lode, which will be hereafter alluded to. On the old south lode, but little has been done until within the last fortnight, when, by fixing a lift of pumps in connection with the horse-whim, we have been enabled to fork the water in the shaft, and commence driving east and west from the bottom of the shaft, which is 12 fathoms deep. The lode in the east end is divided by a horse of killas; it is producing a little tin, but not worth much. The lode in the west end is very regular, about 3 feet wide, and very good. We have sbeaded southward from the old south lode about 50 fathoms, and, in doing so, have discovered, at that distance, another lode, which is of great promise; it varies from 1 to 4 ft. wide, and is producing very good work for tin. We have commenced sinking a shaft on this, for the purpose of laying it open. The south adit will come into this place more than 20 fathoms deep. The engine and stamps are nearly completed, and, I hope, will be in order for working by this day week."—The report was adopted, and a call of 1*l.* per share made, to enable the purser to discharge some pressing liabilities, and to make the first payment on account of the engine.

WHEAL ANDERTON MINING COMPANY.

A special general meeting of adventurers was held at the Bedford Hotel, Tavistock, on the 26th January—JOHN PHILLIPPS, Esq., in the chair.—It was proposed by MR. MARE, and seconded by Mr. W. E. ELLIOTT, that three shares be presented to Captain James Carpenter; whereupon it was moved, as an amendment, by Mr. FOX, and seconded by Mr. HYMAN, that the number of shares do remain as before—237. The original motion was carried by a majority of 71 to 31 votes, to present three shares to Captain Carpenter, making the total number of shares 240. Upon the resolution being carried, Messrs. FISHER and HYMAN protested against any alteration being made in the number of shares. Captain James Carpenter having tendered his resignation as purser, the same was accepted, and Mr. Edmund L. Elliott appointed in his stead, at a salary of five guineas per month, from the 1st January inst. From the accounts produced, it appears that the balance due to the purser at the last meeting was 357*l.* 3s. 3d., to which is to be added the labour cost for October, November, and December, amounting to 433*l.* 18s. 1d.; and merchants' bills, 103*l.* 14s. 6d.; carriage and whim work, 78*l.* 19s. 1d.; the lord's dues for the quarter being 25*l.* 12s., and incidental expenses, 34*l.* 7s. 6d., making a total of 1033*l.* 14s. 5d. On the other side, the tin sold amounts to 377*l.* 8s. 7d.; calls received, 227*l.*, leaving a balance due to Capt. Carpenter of 429*l.* 10s. 10d. The following report from Capt. Carpenter was submitted to the meeting:—"I cannot perceive any material alteration in the size or quality of the lode in the 70 fathom level since its intersection; it averages 6 feet from the north to the south wall, producing good specimens of tin, and tinny about 3 feet in width. Whether there is more lode to the north or not, I am not certain; there are strong indications of its being larger going west, as well as an improvement of its quality in itself. I have every reason to believe it will produce large quantities of tin, as it is further explored, and likely to be of long duration, it being more regular and firmer than I have ever seen it in the levels above. The underlay south is 1 foot in a fathom; therefore, it shows clearly, that in depth it masters the strata through which it passes, which, in my opinion, indicates well. We have not yet cut the lode to the east of the slide in the 70 fm. level, but expect to do so in the course of the week, as there are only a few feet further to drive north. The tributers are getting fair wages, at 4s. in 1*l.*, in the back of the 70. The lode east of the slide, in the 60, is 3 feet wide, producing good stones of tin throughout—a very promising lode indeed. West, in the 60, the lode is 4 feet wide. Some very good work on the north wall, and, as we progress in driving, we are laying open ground that can be taken away from the back at 5s. in 1*l.* The tributers who are stoping the back after the end, are getting good wages, at 4s. 9d. in 1*l.* Another set of tributers, in the back of the 60, are doing well, at 5s. 6d. in 1*l.* One party of men in the 50 fathom level at 7s., the other at 8s. in 1*l.*, and one sett in the 40 at 10s. in 1*l.*, are each getting moderate wages in their respective tributes. The engine-shaft is set to sink under the 70 fm. level 6 feet—put in pent-house, bearer, and cistern for 10*l.* 10s. I shall immediately, with your concurrence, get it to the 80, with all possible dispatch. A winze in the bottom of the 60 fathom level, about 14 fathoms west of the engine-shaft, is sinking towards the 70 fathom level, to open more ground, and make facilities for other pitches. The lode is very good in this place, and should it continue to the 70 as it now is, I have not the slightest doubt of its being worked from 2s. 6d. to 3s. in 1*l.* This point is 8 fathoms west of the present end in the 70. I shipped six tons of tin yesterday, I presume worth 200*l.*; more would have been ready, had we not been retarded in the dressing by the intense frost, and the old stamp's axle breaking."—The report was received and adopted, and a call of 3*l.* per share was made, payable either into the Devon and Cornwall Bank, Tavistock, or to the purser, immediately. The thanks of the meeting were given to the auditors, and Messrs. More, Paull, Fisher, Derry, and Stather, were nominated as auditors for the examination of the next quarterly account. The thanks of the meeting were given to Mr. Phillipps, for his impartial conduct in the chair.

WHEAL COAD MINING COMPANY.

A general meeting of adventurers was held at the offices of the company, Lombard-street, on Thursday, the 3d inst.

JOHN BANKES, Esq., in the chair.

A statement of accounts having been submitted, a call of 7s. 6d. per share, payable forthwith, was determined upon; the amount received upon the first call, of 2s. 6d. per share on 1024 shares sold, was 128*l.*, the cost of costeaning and driving the present adit, and other incidental expenses, amounted to 118*l.* 15s.—thus showing a cash balance of 9*l.* 5s. in the hands of the purser.

The CHAIRMAN said, it gave him great pleasure in laying before the adventurers the accounts, which had been handed to him by the purser; and, upon referring to them, it will be found that, up to the present time, there are no liabilities outstanding; but, on the contrary, the expenses upon the mine had not exceeded the cash in hand. It is true (he said) the operations have been limited, chiefly in driving the adit, now driven 40 fms., and in costeaning, for the purpose of discovering the lodes on the sett, which consist of seven most promising ones—four of which are copper, and the remaining three tin lodes. There is no doubt, in driving the present adit to hill, that large returns may be expected from them, as the present adit will take the lodes at a depth, varying from 15 to 60 fms.; the adit will have to be driven about 150 fms. further to hill to cut the whole of the lodes. From the short period this mine has been at work, its situation is not generally known, and the district itself is new. I, will, therefore, be necessary to state, that this mine is situate upon an estate called Duri, the property of Mr. Hayward, in the parish of Blisland, adjoining the Bodmin Moor, and is granted upon a lease for 21 years, from January, 1848, at 1-15th dues. There is a large stream of water passing through the sett, which will save the expense of steam, as the stream is sufficient to work a 40-ft. wheel 4 ft. abreast, and all other necessary machinery. The strata is a soft decomposed granite, with a large quantity of mica, and distant from killas about a quarter of a mile—in fact, the junction is within the grant; in extent, the sett is 450 fms. on the course of the lodes, and 400 fms. north and south. The report of the mining captain (J. Stevens) is hereto attached:—In costeaning, we have discovered seven lodes—four of which are copper lodes, varying from 16 ft. wide to 4 ft. in granite strata; they carry a large quantity of mundic, mixed with gossan, spar, can, and felspar, on the surface; the remaining three lodes are tin lodes, which produce a fine capel on the back; the whole of the above lodes have been worked upon by the old men, or ancients—indeed, there is a large quantity of their workings now to be seen upon the surface; and the old miners, or ancients, had erected a smelting and stamping-house on this sett—the remains of which are still to be seen. This clearly shows there must have been a large quantity of tin raised by them at one time. I have now by me one of their old stamps, which I found in the old stamping-house; they are much smaller than the ones used at the present day. We sunk 3 fms. upon a large copper lode, 15 ft. big at surface, and drove 14 ft. without cutting the north wall; the lode is composed of gossan, can, spar, felspar, and a large quantity of mundic, with spots of ore, underlaying about 2 ft. in a fathom. The next lode is a large tin lode, 16 ft. big at surface, with as fine a tin capel as a man could see, of a dark blue colour; and I have no doubt upon my mind, when we cut this lode in the adit, which will be at a depth of 30 fms., but what we shall have abundance of the ore; and we have only 30 fms. further to hill to drive to cut this lode, and from which the shareholders may be certain of having large returns, as I never saw a tin lode with the appearances that this one has upon the surface falling of making ore at a much less depth of what we shall cut it at in our adit. We have sunk upon this lode, and some of the stones produce good tin; but not sufficient to pay for dressing. We have commenced our adit at the foot of the hill, brought up and secured our lobby, and have driven upwards of 40 fms. through the most beautiful strata I ever saw—being for the first 3 fms. through a solid mass of most splendid mica underlaying to the lode; after which, decayed granite, easy of driving. We have also cut through several branches, varying from 6 to 8 in. wide, of solid mica underlaying to the lode; in the end, we have a large quantity of water coming from the lode, which we expect to cut next week, as, by dialling and the underlay, we cannot be more than 2 to 3 fms. from the lode, as the water coming from it carries a greenish tint—so I am in hopes we have something worth while before us; and it is not my opinion only, as Captain Floyd, of Tin Vale, and other agents, have been here this last week; and they agree with me that, from the indications we have in our end, we shall not only cut the lode, but also ore, and I trust it will so. Our situation is only a quarter of a mile from killas; and all the great mines in Cornwall, Tresavean and others, have made at the junction of the killas and granite—and there is no reason why we should not do the same—you may depend, before we have driven our adit the whole length to cut the lodes, that we shall not only get rich, but have abundance of ore; and it is my firm opinion, that there is no better speculation in the county. There is sufficient water for all machinery, and this is a great advantage. You must remember this is the Rough Tor district they have said so much about in the *Mining Journal*—and we shall show them lodes, before long, in this district that will bear out the account that has been given of it.

GREAT WHEAL FREDERICK MINE.

SIR,—In your Journal of the 15th inst. there is a paragraph, purporting to be a report of what took place at a meeting of the shareholders of the Great Wheal Frederick Mine—*said* to have been held at the Queen's Head Inn, Tavistock, on Saturday, the 18th of Dec. last,—F. S. Thomas, Esq., *in* the chair; and it is there stated, that certain resolutions, of vital importance to the adventurers, were passed. Allow me, through your paper, to ask F. S. Thomas, Esq., who, of all the shareholders, besides himself, attended that meeting? Was there a meeting of any sort held there that day, or any other day immediately before or after the 18th of Dec.? and if not, how came F. S. Thomas, Esq., to issue a circular to the shareholders, and tell them that it was then and there "resolved," that a call of 10s. per share be made, to be paid within 21 days, &c.? Will F. S. Thomas, Esq., give us the names of the gentlemen who proposed and seconded the resolutions? and (I am sorry to be so troublesome) will he also be kind enough to explain the very remarkable discrepancy between the account of "the meeting" which he sent to the shareholders, in a circular, dated Tavistock, Dec. 18, 1847, and the account published in your Journal on the 15th inst., nearly a month afterwards? The circular of the 18th Dec. is to this effect:—"At a meeting held, &c., it was resolved, that a call of 10s. per share be made, to be paid into the hands of Messrs. Barnett, Hoare, and Co., of Lombard-street, to the order of F. S. Thomas, the purser, &c.—this call not being paid within 21 days, the shares to be forfeited." This is all the news the shareholders have of what took place at THE meeting (?). A month after, F. S. Thomas, Esq., sends a report of *this same meeting* to the *Mining Journal*, in which he informs the lucky shareholders of the Great Wheal Frederick, that, although they are in debt to him 468*l.*, he "resolved" to make them a present of it, and lays it at their feet. I can fancy the thunders of applause that followed this announcement to the *large* body of shareholders then present; but F. S. Thomas, Esq., is not content with that sacrifice—he has not half done—he is the fortunate holder of some 1000, or more, shares in this little El Dorado; and although "there are thousands of pounds' worth of tin," only waiting the trumpery "outlay of 400*l.* to get them to market" (vide *Mining Journal*, May 23, 1846), he also throws, in lieu of his call, 500 of these after the 468*l.*, and thus sacrifices—it would require old Cocker to calculate how much. I should think the cheers that followed this shook the Queen's Head, and John Northway too; and, of course, it was proposed, seconded, and carried, that these offers be accepted; but why is the call of F. S. Thomas, Esq., to be paid into the hands of Messrs. Gill and Rundle, Tavistock, and the call of the other shareholders into Messrs. Barnett, Hoare, and Co., London? Now, Sir, the above was rather an important feature of that meeting to have been withheld a whole month from the *absent* shareholders. We often find pursers left in the lurch, but we do not often find them making the company a present of 400*l.* or 500*l.* in hard cash.—VOX: *Tavistock, Jan.* 25.

SHATTERFORD COAL AND IRON COMPANY.

SIR,—You are aware, that in the early part of last year, a company was projected under this name, for the purpose of working the coal beds on the estate of Shatterford, in the county of Stafford. You will much oblige, by informing me, in the next Number of your Journal, whether the formation of this company was abandoned; or, if not so, whether they have, or are likely to commence operations? [I enclose my card.]—W. W.: *Feb.* 2.

SLAVERY IN THE FOREIGN ENGLISH MINES.

SIR,—From late letters received from the Brazils, it appears that the slave trade is being carried on more vigorously than ever, notwithstanding our numerous ships sent out for its suppression. It is the duty of this country to strike at the root of the evil as far as regards British subjects, and now that this infamous trade is abolished in all our colonies, no British subject ought to be permitted to have anything to do with it. The English mining companies in the Brazils employ an immense number of slaves, one company alone possesses 1000 blacks—surely, this must be contrary to the late Act of Lord Brougham's for the suppression of slavery. This circumstance ought to be looked into by the proper authorities, and it behoves shareholders, as well as the directors, to see that they are not breaking the laws of their country. A merchant of high standing was, some few years back, brought to trial at the Old Bailey for merely being a party in shipping goods apparently intended for the exchange of slaves on the coast of Africa, whilst these companies are allowed unmolested to be parties to this infamous traffic. Trusting that the day may shortly arrive when all slavery may be put an end to, I remain, Sir, yours, &c.,

Cornwall, Jan. 31. ANTI-SLAVERY.

THE DIVINING-ROD.

SIR,—As some of your correspondents have been favouring us with their opinions on the divining, or dowsing-rod, perhaps others of your readers would be amused with (as the Cornish miners would call them) the *old men's* opinions on the subject. I quote from M. Azamam's *Recreations, Mathematical and Physical.* "But now-a-days," says he, "we understand, by *Baguette Divinatorie*, a small forked branch of light wood, commonly of hazel wood, which several have made use of to very good purpose, in discovering the *most noble metals*, which are now the very bond of society; and, as it is said, even robbers and murderers, of which we had a notable instance in 1698, in one James Aymar, of Dauphiny, who pursued a murderer 45 leagues, and found him out by his *rod*; and when he came to Paris, he gave several proofs of his dexterity, in making use of the rod, by the discovery of water, metals, and hidden treasures. He takes a forked branch of any sort of wood, and holds the two prongs with his two hands, but do's not grasp 'em hard. He holds them, so that the back of his hands are turned to the ground—the point goes foremost, and the rod is a'most parallel to the horizon. In this fashion he walks softly along, and when he passes any place where there's water, or mines, or silver hid, the rod turns in his hands, and bends downwards; and the same thing happens in holding it over stolen goods, and following the track of robbers and criminals, whom he easily distinguishes from the innocent—for when he puts his foot upon one of theirs, the rod turns towards the criminal. Sometimes he uses a straight stick, and holds it upon his fingers, with his two hands at some distance. As all persons are not of the same temperament, so this *divining-rod* do's not succeed equally with all—for a great many have used it without success, as destitute of the gift of Nature. Kercher, and Schott, and Dechales, do all speak of it as a thing frequently experienced, though every one is not capable of making the experiment; and the last of the three says, 'tis absolutely the easiest and most certain means yet tried for the discovery of water. Some take a long, straight, and smooth shoot of hazel, or any other wood, and hold it by the two ends, bending a little archwise, and keep it parallel to the horizon, that it may turn more readily to the ground, when it passes over a source of water, &c." Father Kercher has seen the Germans practise this piece of divination another way. He says—"They cut a small hazel stick into two almost equal parts, making the end of the one hollow, and cutting the other to a point, and so inchasing the one in the other. The stick, or shoot, thus used, must be very straight, and without knots. They carry it before them between the tops of the forefingers of each hand; and when they pass over veins of metal, or of water, the shoot moves and bends. Some make use of a forked rod a foot long, holding it upon the extended palm of their hands. Others lay it in *equilibris*, upon the back of their hand, that it may move with more facility when they pass over a spring of water. Though the modern authors above-mentioned take this *divining-rod* to be a new thing, yet it is certain, the *ancients* spoke of it, and gave it different names. Neuhussus called it *virga divina*, and Varro seems to have meant some such thing, by entitling one of his satyrs, *Virgula Divina.* Peter Bewn called it *caduceus*, Willenus, *virga mercurii*, and Agricola, the enchanted rod. Some have called it *Aaron's rod*—others *Jacob's stick*—others *Moses rod*, with which he brought water out of the rock; and Cicero, in his *Offices*, speaks to his son of a *divine-rod.* Some say this *divining-rod* turns likewise to a loadstone—others, that it turns to the bones of dead corpses, and has been used with success in distinguishing the bones of canonised saints from those of others." Our author concludes—"Several other things are said of it, which seem incredible. I leave every one to their own experience."—I. M. S.: *Battersea, Feb.* 1.

A correspondent of the *Penzance Journal*, in reference to the letter of Mr. Martin, on this subject, says—"I perceive in the *Mining Journal*, an attempt to explain the operation of the divining-rod, mentioned in Mr. Hunt's lectures. The philosopher alluded to, supposes that as electric currents prevail in the neighbourhood of copper lodes, the person holding the divining-rod may receive a shock, which would, of course, produce muscular contraction, and so cause the divining-rod to bend. Now, Sir, this cannot be the case—for the currents observed between contiguous lodes are of very low intensity, and, therefore, not capable of giving a shock; but even supposing they were sufficiently intense to overcome the law of conductibility of the human body, they could not pass through the system of a man standing on the surface, unless a special provision were made for the completion of the circuit through the individual's body. The correspondent of the *Mining Journal* probably confounded frictional with voltaic and thermo-electric currents."

Queen Victoria reigns over an empire of 2,814,040 miles, in extent, containing a population of 129,829,500.

GREAT CALLESTOCK MOORS.—A meeting of adventurers took place at the Royal Hotel, Truro, when the following accounts for Nov. and Dec. were passed, and the purser was authorised to take legal proceedings to recover the arrears of costs. A resolution was also passed, for stopping the mine and selling the materials, unless there was some material improvement by the 31st Jan.:—To balance due on last account, 353*l.* 6s. 3d.; costs and merchant's bills, 479*l.* 8s. 3d. = 832*l.* 14s. 6d.—Received for arrears, 3*l.*; division of cost in Oct., less arrears, 243*l.* 9s. 4d.; call made in Nov., less arrears, 107*l.* 18s. 4d. = 354*l.* 7s. 8d.—Balance against the adventurers, 478*l.* 6s. 1d. There had been, however, sold, ore amounting to 240*l.* 14s. 3d., the bills for which were not yet due.

WHEAL BAL.—A meeting of adventurers in this mine took place on Friday last, when the costs for the past eight months were said to have been 471*l.* —to meet which there was a balance from last account of 85*l.*, and 320*l.* received for tin sold. A call of 10s. per share was made.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CONDURROW.—I am really surprised, as well as amused, to see the periodical quotations of Condurrow shares, from the fact, that while the mine has continued to improve, which she has done steadily up to this moment, shares have been, during the same period, dropping. I can assure you, that the mine was never in a better position than at present, gradually improving in all the levels, more particularly in the 30 fm. level, where there is now a course of ore, worth from 25*l.* to 30*l.* per fm., and daily improving; this end is now coming under the fine course of ore which has been driven through in the 10 fm. level for a great number of fathoms in length, and, consequently, leaving a valuable back of 20 fms., which, by-and-bye, can be worked at a low tribute; and had the standard been the same as it was 12 months since, the mine would be in a position to pay regular dividends.

SOUTH MOLTON CONSOLS.—It is expected this mine will be got in "fork" in the course of next week.

TAVY CONSOLS.—I never like to give high colouring to reports of mines; yet I think the parties furnishing the reports ought to give some idea of what the lode really is. I consider the last report to be very tame indeed, if it be true they have a lode 11 ft. wide, all good work, and that six men broke upwards of 40 tons, in the last three weeks, out of the 102 sold in the month.

WHEAL TRYPHENA.—At your instance, signified through Mr. Pendarves and Mr. Hutchinson, we have this day inspected Wheal Tryphena; and we now submit to you our report and opinion of that concern. We have nothing to remark upon the appearance of the ends of the different levels, beyond the fact, that they are looking promising, although just now not very productive. The 40 and 65 fm. levels have each been extended about 180 fms. to the west of the engine-shaft, or to within 120 fms. of the western boundary of the sett, passing through very productive tin ground in the 40, for 50 fms. or more; and in the 65, for about 30 fms.—the average tribute in those levels is about 4s. per 1*l.* It is to be regretted that the circumstances of the mine have not admitted of the rapid sinking of the sump shaft—that appearing to us an object of paramount importance. It will require about 12 months to sink the shaft 15 fms. below the present bottom, and to extend the level from thence under the productive ground in the 65, before referred to; and the appearance of the 40 and 65 fm. levels fully warrant the vigorous prosecution of this work; and we would further beg to suggest the propriety of the shaft being kept going continually. The quantity of tin returned we find is about 10 tons monthly; and, judging from the extent of productive ground opened upon, we think that those returns will be maintained for several months, even if no further discovery be made; and we would remark, that we have seldom inspected a tin mine in so early a stage of its working where the prospects have been better or more flattering. We would beg to call your attention to the eastern division of the mine, which is not prosecuted with that spirit we could wish; and we would recommend your driving one or more of your levels in that direction—say, the 27 fm. level to the boundary—and drive a cross-cut somewhere in this level to intersect the Llandower and your other north lodes; the Llandower lode has been, and still is, very productive in Condurrow for copper ore; from the present 27 fm. level end east to the boundary is 180 fms. We certainly regard the driving of this level east as a very good speculation. The western levels can be driven for about 40s. per fm.; and the eastern levels at from 3*l.* 10s. to 4*l.* per fm. There is a cross-cut driven north in the 16 fm. level 110 fms. on a cross-course, which has intersected four lodes, upon which little has been done; but we think them worthy of attention, and, if opened upon, would probably be found considerable auxiliaries. There is also a cross-cut driven 50 fms. south, in this level, which has fallen in with a lode; but it has not been much extended upon—we think it should be. A cross-cut has also been driven north about 50 fms. in the 40 fm. level, which has intersected a lode that has been productive; there is at present a pitch working therein at 11s. per 1*l.* The Killevose lode, which is about 200 fms. to the north of the main working, has been productive in an extraordinary degree—at present it is not looking very well; but, from the fact of from 500*l.* to 600*l.* worth of tin having been raised in the adit level, we consider that this part of the mine merits great attention; and we would recommend that the adit level should be continually prosecuted. The return of copper ore is uncertain, although good bunches of rich grey ore are at intervals found. They have at present about 19 tons of very superior quality (sampled) on the mine. From all we have stated, you will infer that the prospects of the concern are very encouraging; and, if you carry on the mine with spirit and vigour, we think you have as fair a prospect of success as they have in most mines. The engine, when thoroughly repaired, is adequate to the draining of the mine 50 fms. below the present bottom. A very powerful stamps has just been completed, and is ready to work—the cost, we suppose, may have been 700*l.* We think it will be of great advantage to the mine, as your having a machine of this sort on the concern will reduce your cost of carriage very materially. We think a saving of 25*l.* to 30*l.* monthly will be effected in consequence upon the present returns, and, as those increase, the saving will proportionally increase. We would suggest the propriety of your increasing your tutwork to the extent of 60*l.* per month, to be expended in driving the 27 fm. level east, sinking Bennett's shaft under the 40 fathom level, and in proving the lodes cut in the north and south cross-cuts.—NICHOLAS VIVIAN; CHARLES THOMAS; CALEB THOMAS: Jan. 27.

WHEAL ROBERTS.—This mine, situate in the parish of Gulval, near Penzance, and which has been recently put to work by highly-respectable adventurers, is likely to turn out a prosperous concern. Already a large steam-engine has been put to work, and the requisite buildings have been erected. The engine-shaft is sinking on the great lode, and it is about 20 fms. deep; and in driving east another large tin lode was discovered, producing excellent samples of that ore. Wheal Roberts is in the immediate vicinity of Ding Dong Mine, and from the specimens of tin already sent to the smelting-house, Capts. Evans (of St. Agnes) and Richard Grenfell (of Gulval), as well as the body of adventurers, look forward to results of the most gratifying nature. We trust that the expectations may be fully realised.—*Penzance Journal.*

THE MEXICAN MINES.—These mines are the subject of the following comment in the *Washington Union*:—"We should not be surprised to hear, by some early arrival, of the capture of the mines of San Luis and Zacatecas by two columns of General Scott's army, under special instructions from the war department. We understand that expeditions were about to be organised for this purpose, when the last official letters left Mexico for Washington. If we may believe the letters from the camp, written even before these expeditions were suspected, the effect will be to deal another heavy blow at the enemy, by cutting him off from some of his material resources. To show what were the speculations upon this subject, we lay before our readers the following extracts from a letter published in the last *New Orleans Commercial Times*, from a correspondent in the city of Mexico, of the 1st of December:—'The Mexicans—at least those who are sufficiently enlightened to think—feel that they have been for years enslaved under the captivating name of liberty; its sweets, its national blessings, they have never enjoyed; and there is no bond of union between them and their Government. Indeed, the latter would cease to exist altogether, if we were to cut off the resources which still remain to them. These are to be found in the rich mining districts of Zacatecas, Guanaxuato, and San Luis Potosi. We should take prompt steps to seize on these departments. A foreign gentleman here, largely interested in mining operations, and a resident for 27 years in Mexico, lately told me that the mines were never at any period so productive as at present. Taking the annual produce at $20,000,000, 3 per cent., the sum exacted by the Government amounts to $60,000. This is an important item in a budget. The mine of Real del Monte, 30 leagues from here, pays the Government $5000 annually. The house of Mackintosh and Co., in the city, exercised predominent influence on the powers that were in this country; they had the controlling of the mines in Mexico, Guanajuato, and Zacatecas, receiving the bars of silver from the mines at so much per mark (8 ozs.) As this silver, in bars, contained 16 grains of pure gold to the mark, this house made a handsome profit by the arrangement, since no allowance was made for the purer metal. It is the custom, I believe, in every country, when bar-silver is coined in any quantity, to give the owners the value of the gold, after the expenses attendant on separating it are paid. I have heard that the house above alluded to has represented to the Government of the United States that it would be better for the latter to prevent the exportation of silver in bars, unless at a [illegible] per centage. I think sound policy indicates the propriety of taking the supervision of the mines into our own hands, if we contemplate making a long stay here. Many respectable Mexicans fancy that the great commercial house above spoken of is playing a double game with Santa Anna and our Government. They say that Santa Anna, before leaving the capital, made over to the head of the firm his haciendas at Encierro and Mango de Clava, with all the real estate he possessed in the republic. This same gentleman is not in the best odour, either with his countrymen or Americans, for the conspicuous part he played in the armistice at Tacubaya.'"

ALSTON, CUMBERLAND—*(From a Correspondent.)*—The parish of Alston, in Cumberland, though numbering a population of 7000 souls, had only 16 deaths in the three months, ending the 31st of December. This is the more remarkable, as many of the population are engaged in mining, which is considered, and justly, to be a very unhealthy occupation. Alston is the highest (in altitude) market town in England, and is the centre town of Great Britain, measuring from north to south and east to west.

A TOWN SWALLOWED BY AN EARTHQUAKE.—Our correspondent at Malta writes:—The Neapolitan steamer *Capri* brought intelligence from Syracuse that the earthquake which was felt here on the 11th, had laid the city of Augusta in ruins. The first shock was felt at 1 P.M., and was so violent that all the people fled from their houses. The following one, a few minutes afterwards, destroyed the whole place, except 27 houses; the mole sank, and where it formerly stood, there was no bottom at 50 fms. The last accounts received at Syracuse state that 35 dead bodies had been found and 59 wounded recovered from the ruins. The earthquake was also felt at Noto, Syracuse, and Catania, with partial damage, and at Messina, without damage.

KNITTING STOCKINGS BY STEAM.—A number of influential inhabitants of Ipswich have introduced into that town an important branch of industry, likely to give employment to a large number of persons. In Carr-street, machines are now at work in knitting stockings by steam. The work is done with beautiful accuracy. One young person can attend to three machines, and each machine will knit one stocking in three hours.

SHEFFIELD AND ITS SUPPLIES OF COAL.—The price of coal in Sheffield and the neighbourhood varies, according to the quality, from 2s. 6d. a ton, the lowest, to 7s. a ton, the highest price, at the pit's mouth. The two most valuable beds of the Yorkshire coal-field are, one which lies about the middle of the series, and about 300 yards below the topmost workable seam. This bed is called, according to the different places at which it is worked, or its owner, the Barnsley Thickbed, the Gauber Hall, the Worsborough, the Elsecar, Lord Fitzwilliam's, Lorby's, Frances, the Darnall, the Handsworth, and the Reighton coal; this is a remarkable pure hot coal, and free from earthy particles, and is on that account the best coal for coverting iron into steel, in which process it is requisite to preserve both a high and an even temperature, and this coal, making little or no deposit on the bars, does not interrupt the even course of the draught; for the same reason it is the best coal for making coke for railway engines, as any deposit on the bars causes them to burn and wear out. This coal may be called the "converting coal." It is, however, only the pit pieces of this which are used for converting coal, the broken and smaller parts being sold at a lower price for engine coal. The other bed is the Silkstone, the Sheffield bed, Newbold's, the Intake, and the Unstone bed, all of which are precisely the same coal. This bed lies about 300 yards below the foregoing, and is the lowest of the Yorkshire workable seams. It does not make so good railway coke as the other, being less for this purpose by 2s. a ton; it is most used in Sheffield for manufacturing purposes, for melting steel, for smiths' use, and for house-fire coal. This may be called the "meltings coal;" it is cheaper than the other at Sheffield, and has been sold for a considerable time at the price of 8s. a ton, delivered at the consumer's door. This is the coal which is brought up to the pit mouth in the town of Sheffield. The price of the "converting coal" increased in May, 1844, from 8s. to 9s. 3d. a ton, delivered at the consumer's door, so that the demand exceeded the supply. This is the coal of which, more than any other, Sheffield wants an increased supply, and of this very coal there is abundance along the line of the Sheffield and Lincolnshire Railway, which can thereby be brought into Sheffield at a low price.

DOWLAIS.—The average of coal used at the Dowlais Iron-Works, is estimated at 1500 tons per day.

RAILWAY IRON.—A vessel, arrived at the port of Liverpool, from New York, has brought, in addition to a general cargo of American provisions, 63 tons weight of railway iron, consigned to order. We recently noticed some arrivals of the kind from the United States, and this further importation of the article is of interest, whether it be the production of the States, or the iron be the manufacture of the United Kingdom and returned to this country.

The following arrivals of specie, since our last, may be noticed—viz., *ex Caledonia*, at Liverpool, 32,000*l.* value; *ex* Royal Mail Steam Packet-ship, *Tiviot*, from the West Indies, $135,000 on merchants' accounts, and 7130*l.* in British silver; *ex John Bright*, from the Mauritius, 10 boxes of specie, consigned to order; *ex Avon*, Royal Mail Steam-packet, from the West Indies, $268,278, 1017 ounces of gold dust, and 150 ounces of British coin.

On Thursday, the Bank of England received 130,000*l.* in gold from Russia overland. Same day, arrived at Liverpool, the *Patrick Henry*, 21,500*l.* in specie.—The *Great Western* sailed on Wednesday, from Southampton, for the West Indies, with 1000 bottles of quicksilver, valued at 17,900*l.*; and specie, value 43,000*l.*

IMPROVEMENTS IN THE MANUFACTURE OF ACIDS.—A patent has been obtained by Mr. Paul G. Prelier, of Rue de Rivoli, Paris, "for improvements in the manufacture of dry sulphuric acid, and in the manufacture of smoking, or Nordhausen sulphuric acid." The patentee commences his specification by stating, that, in consequence of the great affinity of sulphuric acid for water, it is difficult to concentrate the acid, even to 66° Baumé; therefore, in order to obtain dry sulphuric acid, he combines simple sulphates with a fresh proportion of acid, for the purpose of forming bi-sulphates, which he decomposes by the action of heat, and thus obtains dry sulphuric acid. The manufacture of dry acid naturally leads to the production of smoking, or Nordhausen, sulphuric acid, as the latter is formed by the addition of dry acid to sulphuric acid, which has been concentrated to 66°—the specific gravity of the Nordhausen acid increasing with the quantity of dry acid added. In carrying out the invention, the patentee prefers to employ 100 parts sulphate of soda, 2 parts sulphate of potash, and 2 parts sulphate of lime; but these proportions may be varied; and even if sulphate of soda be alone employed, dry sulphuric acid will be obtained. The mixture is put into freestone retorts, set in a suitable furnace—then, by means of a bent glass tube, the acid is introduced into the retorts, and heat is gradually applied. Shortly after the application of heat, drops of water will proceed from the retort; then acidulated water, followed by acid at 40°, 50°, and 66°; and, finally, by acid, which fumes, or smokes. To enable the operator to judge correctly as to the progress of the operation, vessels, containing water, are placed, to receive the drops of acid; and when each drop produces a sound, resembling that which would result if a red-hot iron was immersed in the water, the acid that produces the noise is dry acid. Vessels, to receive the acid, are now placed below the retorts, and luted with clay; and the retorts are subjected to a strong heat, until the acid ceases to drop into the vessels. Dry acid is thus obtained; but if it be desired to obtain Nordhausen sulphuric acid, a quantity of acid, concentrated to 66°, must be introduced into the receiving vessels, when they are placed below the retorts; and, by the admission of the dry acid, the density of the acid in the receiver will be increased to 67°, 68°, and 69°, according to the quantity of dry acid that enters the receiver. By this means, sulphuric acid is obtained perfectly clear, and never coloured like the Nordhausen sulphuric acid, nor charged with earth, or other foreign matters.

COCHRANE'S CURVILINEAR SAW-MILL.—On Tuesday, the Lords of the Admiralty paid a visit to the naval establishment at Woolwich, in order to inspect the new saw-mills, just completed by Mr. Rolt, the contractor. The invention of Mr. Cochrane is the only one which may be said to be successful for the manufacture by machinery of the timbers employed in the framework of vessels; and the erection just completed at Woolwich Dockyard is the only one on Mr. Cochrane's plan in use in England. The machine requires three persons to tend it, while at work—one at each of the saws, and a third to direct the bevelling motion. Their lordships appeared to be highly delighted with the perfection of the machinery, and the excellent quality of its work. Another mill, for cutting crooked timber with the grain, also excited the admiration of their lordships. An irregularly shaped log, apparently utterly useless from its eccentricity of form, about 15 inches square by 30 feet in length, was cut longitudinally into four excellent planks, 3¾ inches thick. When reduced to this thickness, the bend in the planks is easily managed by the ordinary processes of steaming and pressure, in consequence of the grain remaining undivided. A great activity prevails in all our dockyard establishments.

THE VENTILOMETER.—At the Royal Institution, on Friday last, an instrument, invented by a French naval officer, in high command at the port of La Rochelle, where it has been tried during more than three years, was described. It foretels the changes that take place in the electro-magnetic currents, so that during the 24 hours succeeding any period of observation, the wind indicated by its needle will certainly blow—the change generally taking place between 12 and 18 hours. The instrument is not acted upon by the light breezes, but by any strong wind, and the inclination of the needle indicates the velocity of such winds, up to violent tempests. The principle was explained by Mr. Schmidt, who will be happy to show the instrument to any scientific gentleman. Should its predictions prove accurate, the instrument cannot fail to be of the highest importance to our commercial marine, as not only regulating the departure, but also the navigation of vessels.

NEW PATENTS.

J. Collins, Leominster, Hereford, architect, for certain improvements in furnaces, stoves, grates, and fire-places, and in kilns and other apparatus for preparing vegetable and other substances, and the generation and application of heat.

W. W. Pattinson, Felling, near Gateshead, Durham, chemical manufacturer, for improvements in the manufacture of soda.

W. H. Barlow, C.E., Derby, for improvements in the manufacture of railway keys.

W. Russell, Lydbrook, Gloucester, ironmaster, for an improvement in the preparation of such bar-iron as is used in the manufacture of certain kinds of rod-iron.

A. V. Newton, Chancery-lane, mechanical draughtsman, for improved machinery for manufacturing shot and other solid balls. (Being a communication.)

J. Blackwell, Winsford, Chester, for certain improvements in evaporating furnaces.

T. Robinson, Coventry, ribbon manufacturer, for improvements in looms for weaving ribbons and other fabrics.—*Mechanics' Magazine.*

BAR-IRON.—"Is there any establishment in which bar-iron is or can be manufactured tapering, say from 9 in. to 3 in., in width, and from 1 inch to one-eighth of an inch in thickness, and of any length, say from 30 to 50 feet, one edge being straight from end to end? If this cannot be done, can several bars be welded one on the end of the other, and hammered out to the length, width, and thickness, above-named; and if so, will the iron be as strong at the welds as elsewhere, and at what price per ton can iron be so prepared?—J. H.: *Feb.* 1.—*Mechanics' Magazine.*

TIN.—There are three sorts of tin; 1, block tin, so called from its being cast in the form of blocks; 2, bar tin which is formed by running the tin into grooves in tables of granite; and 3, grain tin, which is formed by melting together in an iron vessel the better portions of the other two sorts. The third is by far the best, and is, from its superior purity, ordinarily used by dyers as a mordant.

RAILROAD SPRINKLER.—On the Stonington railroad they carry a "sprinkler," for the purpose of watering the track and road bed, thereby diminishing the friction of the cars upon the track, preventing the boxes and journals from being heated, by keeping away the dust, preserving the paint and varnish by not having to clean the cars so often, relieving the passengers from great annoyance, and taking from the break-men a large share of their labour at the through stations. This improvement has been fully tested for the past two months upon the road, and found to be popular with travellers. It requires about 2000 gallons for the Stonington-road (47¼ miles). The machine is attached to the train behind the usual water tank, and is under the control of the engine-man by a rope attached to a valve, which he shuts and opens at pleasure. When it is in operation, not a particle of dust appears inside or outside of the cars. In warm and dry weather the car windows can be left open without objection. This is a useful invention, where there are tracks running through sandy districts.

TUBULAR RAILWAY.—A proposition has been started in Philadelphia, to have a large iron tube, 3 ft. in diameter, to extend from Port Carbon to Philadelphia, a distance of 90 miles, to convey coal from the mines at Port Carbon to Philadelphia. The expense is estimated at about $ 14,000,000, and there is sufficient descent to make it practicable.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.

Bank Stock, 9 per Cent., 200	Belgian Bonds, 4½ per Cent., 89½
3 per Cent. Reduced Ann., 89 ⅛	Dutch, 2½ per Cent., 54½ 4
3 per Cent. Consols Ann., 88⅞	Brazilian, 5 per Cents., 85⅞
3 per Cent. Annuities, 87⅛	Chilian, 6 per Cents., 92
3½ per Cent. Ann., 90 ⅛	Mexican, 5 per Cents., 19 18⅞
Long Annuities, 9	Spanish, 5 per Cents., 22
India Stock, 10½ per Cent., 243 1	Ditto 3 per Cents., 32½ 2
3 per Cent. Consols for Acc., 88⅝ ⅞	Portuguese, 5 per Cents., 80½
Exchequer Bills, 1000*l.* 3d., 32 28 pm.	Russian, 5 per Cents., 109 10

MINES.—The amount of business transacted through the week has not been extensive, although we learn that several transactions have been effected, whilst others of a large amount are in course of being done.

Negociations are still going on in Devon Great Consols, which are likely to terminate at an improved price; this we might reasonably expect from the positive improvement in that part of the sett, known as Frementor, in which these lodes are now being developed.

Treviskey and Barrier have also been in request, but we are not aware of many transactions, in consequence of sellers giving advanced quotations.

Tavy Consols have considerably advanced during the past few weeks, having from a nominal price of 4*l.* per 1024th share, risen to our present quotations, and buyers still in the market.

Great Rough Tors have been done; and as the shafts are progressing rapidly, we have no doubt they will get into great demand—the intentions of the company being to sink to the 60 fm. level, before they see the lodes.

Herodsfoot shares have changed hands within the last few days, the reports from the mine being highly favourable.

Another week has passed, and still we find the standard for copper ore equally depressed—a depression arising from a combination of a wealthy and powerful monopoly—whose baneful influences are experienced by an ill-paid community of some 70,000 operative miners, and its consequences at once discouraging, and retarding the energies of enterprising capitalists, who, with the sensibility of honour and humanity, would "live and let live"—an influence that crushes one of the most important interests of a great commercial nation. We may sympathise with the laborious and speculating tributer, who, after working a *core* from 10 to 12 hours in a space limited by brief measurement, breathing the same air over again and again, finds, at the expiration of his two months, he has earned but barely sufficient to keep his emaciated body from death. We may condole with his employers, whose capital has been invested, with the pleasing hope of an adequate return; but, to pursue their course would be injurious—to stop ruinous. Still we can render no positive help—we may point to the cause, and tell them it arises from the avarice of his "brother man." True, we might suggest a remedy—we might raise our humble voice, and call on the influential and wealthy to unite in opposing a monopoly revelling in its self-formed power, enriched by the sweat of poverty and the industry of labour—we might represent to our metropolitan merchants and capitalists, that a fairer field for legitimate enterprise seldom presents itself, in the establishment of an efficient smelting firm, than at the present period. If, indeed, the mining interest of Britain were not so limited in its operations, and its speculators as extensive as its merit deserve, we think that an open and honourable competition would long since have dissolved the monstrous monopoly of our avaricious smelters.

At a period when the universal cry of freedom in our commercial intercourse is heard throughout the land, can it be supposed that so small a body as the smelters will extract from a kingdom, and its colonies of 300 millions, a profit of 30 per cent. on a material of universal consumption, at the same time defying competition? Such a combination exists, startling as the fact may appear; and, with this open disclosure, we invite and hope that a full and perfect investigation may be instituted by those who may feel interested in a matter of so deep importance to the mining interest—firmly believing that a new establishment, conducted on independent principles, will meet with every encouragement and co-operation from the copper miners of Great Britain.

It may be a matter of surprise that the proprietors of Devon Great Consols have apparently remained so long submissive to such an immense deduction from their returns of, say 16,000 tons per annum—especially when we consider the individual wealth of the proprietary alone sufficient to effect the desired object. We have heard that a feeling of disapprobation has emanated from the board of directors, in a remonstrance to the smelters; and we trust that this laudable step on the part of the leading mine will have some effectual influence.—In referring to Devon Great Consols, we do not exempt Cobre, Burra Burra, or the foreign mines; for all participate in the swamping effects of the present standard.

Since writing the foregoing, we learn that the smelters have resolved on reducing the price of copper *one halfpenny per lb.*, or 4*l.* 13s. per ton—thereby showing their tenacity to their price fixed for the ores; and, as far as we are advised, an act unexpected, or unsolicited, by the manufacturer or consumer.

In the foreign share market there has not been much done. Some Bolanos, Imperial Brazilians, Real Del Montes, St. John Del Reys, and Asturians, have changed hands.

Despatches have been received by the St. John del Rey, Imperial Brazilian, and Copiapo Companies—copies of which we publish in this day's paper. St. John del Rey, shows a profit of 2812*l.* for the month of October.

By the Imperial Brazilian despatches, we learn that the Bananal Mine was in fork: that the rain had set in, which gave sufficient surface water to work the old water-wheel; and the new wheel and leats were progressing rapidly.

By the Indian Mail, received on Tuesday, we learn that the metal markets of Calcutta and Bombay continued good. Iron was in demand, with an advance on some sorts. Copper steady in price, and several sales effected: one of South American was made, although the article was of an inferior quality. In lead and tin plates, the prices remained stationary. Spelter and steel had receded in price—the latter arising from its inferiority of quality.

HULL, THURSDAY.—The market has been tolerably steady throughout the week, and we think more confidence has been shown. North British command higher rates; Leeds and Thirsk look better, and the York stocks are in fair request—especially the lighter kinds. Should the forthcoming meetings be of a favourable character generally, we shall have higher prices, beyond doubt—but much will depend upon clear and explicit statements at the meetings.

The following extract from the recently-issued circular of the Messrs. Allan, of Edinburgh, sufficiently indicates the present state of the northern share markets:—"Bank stocks and railway shares, although decidedly firmer than they were, are still at prices which yield 5½ to 7 per cent. certain; while Consols, at 90, only afford 3½. Manufacturers are much pinched for money; the ordinary business of our commercial towns is crippled—in fact, we are in the unusual position of having certain great interests starving; while others do not know what to do with their money. This anomaly cannot last long. The public certainly have had a fright with railway securities. Their losses have been enormous. The unending calls of last year, whether shareholders could possibly meet them or not, and in the face of great depression throughout the country, lowered their value immensely. The depreciation on one line alone—the Great Northern—thanks to the directors and their officials, for their unjustifiable mode of treating their shareholders—exceeds a million and a quarter sterling; and there are few proprietors, we fear, of almost any similar property, who can give a satisfactory account of their last-year's purchases. There cannot be a question, however, that many of the main lines, at present rates, offer eligible investments, and that, sooner or later, they will afford handsome returns to those who have the means and the nerve to buy them now."

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic Returns.* 1848	1847
Arbroath and Forfar	16	£179,939	26	4 *p.c.*	174	234
Birkenhead, Lancashire, & Chesh.	15	706,793	38½	—	£524	481
Dublin and Drogheda	35	733,655	52	3½	669	693
Dublin and Kingstown	7¾	473,282	—	7	791	928
Dundee, Perth, & Aberdeen Junc.	47½	285,745	30	6	654	287
East Anglian (Lynn to Ely)	26½	908,892	12¾	—	410	—
East Lancashire	24	1,207,490	21¼	—	971	512
Eastern Counties	202½	7,698,370	16½	5	10021	9145
Eastern Union	50	979,926	45	—	1120	890
Edinburgh and Glasgow	53	2,375,745	43	6	3138	3217
Edinburgh and Northern	29	953,207	21	—	681	—
Glasgow, Paisley, and Ayr	64½	1,890,547	72	7	1757	2009
Glasgow, Paisley, & Greenock	23	838,964	17½	3	946	916
Gt. Southern & Western, Ireland	110½	1,876,326	24¼	—	1669	1028
Great Western	269¾	10,630,763	103½	8	16008	16295
Kendal and Windermere	10½	147,001	23	—	106	—
Lancaster and Carlisle	70	1,291,913	54	—	1118	—
Lancashire and Yorkshire	92½	6,807,314	88½	7	8006	7601
London and North Western	428	20,010,467	150	9	33504	34874
London and Blackwall	4	1,146,289	6	½	606	661
London, Brighton, & South Coast	182½	5,659,180	42¾	4	6073	5367
London and South-Western	186	5,836,132	54¾	9	6269	5174
Londonderry and Enniskillen	14½	160,013	16	—	103	—
Manchester, Sheffield, & Lincolnsh.	46	2,078,135	80	5	2047	1734
Maryport and Carlisle	28	424,417	—	3	501	501
Midland Company	402½	8,658,604	116½	7	17738	16149
Midland Great Western (Irish)	36½	583,776	—	—	605	—
Newcastle and Carlisle	65	1,185,080	117	6	1717	2015
Norfolk	81¾	1,375,633	82	6	1526	1262
North British	78	2,514,180	27¾	5	1714	1367
Shrewsbury and Chester	17	591,138	21½	—	468	251
South Devon	29	1,339,860	23	—	671	401
South-Eastern	165½	6,398,218	31¾	6	6440	5710
Taff Vale	38	785,607	—	5½	1747	1230
Ulster	25	646,211	52	6	549	676
Whitehaven Junction	12	130,000	—	4½	154	733
York, Newcastle, & Berwick	236½	3,685,102	35	9	10019	8051
York and North Midland	230½	3,196,869	79	10	6131	4636

Total earnings for last week, £148,325, being an increase of £15,049 over last year.

LATEST CURRENT PRICES OF METALS.

LONDON, FEBRUARY 4, 1848.

	£	s.	£	s.	d.
IRON—Bar *a*..Wales...*ton*	0	0—	7	0	0
..London ..	0	0—	8	5	0
Nail rods „	0	0—	9	0	0
Hoop(Staf.)„	0	0—	9	15	0
Sheet „ „	0	0—	10	15	0
Bars „ „	0	0—	9	5	0
Welsh cold-blast foundry pig ..	4	0—	4	10	0
Scotch pig *b*, Clyde	2	8—	2	10	0
Rails, average	0	0—	7	0	0
Chairs	0	0 -	5	0	0
Russian, CCND *c*...	17	10—	18	0	0
„ PSI	0	0—	——		
„ Gourieff	0	0—	——		
„ Archangel	0	0—13	10	0	
Swedish *d*, on the spot	0	0—11	5	0	
„ Steel, fagt.	0	0—16	5	0	
„ „ kegs *e*	0	0—14	0	0	
COPPER—Tile *f*	0	0—92	0	0	
Tough cake	0	0—93	0	0	
Best selected	0	0..96	0	0	
Ordin. sheets, *lb*...	0	0— 0		10½	

	£	s.	£	s.	d.
COPPER—Ord. bottoms ..	0	0—	0	11½	
YELLOW METAL SHEATHING	0	0—	0	0	8½
TIN—Com. blocks *g*...*cwt.*	0	0—	4	2	0
„ bars	0	0—	4	3	0
Refined	0	0—	4	6	0
Straits *h*	3	16—	3	18	0
Banca	0	0—	4	4	0
TIN-PLATES—Ch., IC *i*, *box*	1	8—	1	10	0
„ IX ...	1	14—	1	16	0
Coke, IC	1	3—	1	4	0
„ IX	1	9—	1	10	0
LEAD—Sheet *k* .....*ton*	0	0—19		0	0
Pig, refined	18	15—19		0	0
„ common	17	10—17		15	0
„ Spanish, in bd.	0	0—17		0	0
Red....	0	0—19		0	0
Dry White....	0	0—23		0	0
Shot (Patent)....	0	0—20		0	0
SPELTER—(Cake) *l* on spot	19	10—19		15	0
„ for arrival	0	0—19		0	0
ZINC—(Sheet) *m* export.*	26	0— 27		0	0
QUICKSILVER *n* .....*lb.*	0	0— 0		4	6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto
e In kegs ½ and ¼-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash
in bond. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash.
m Discount 1½ per cent. *n* Discount 1½ per cent. * For home use it is 32*l.* per ton.
* Those marked with an asterisk (*) are dividend per share.

[FROM OUR CORRESPONDENTS.]

GLASGOW.—A fair amount of business has been done this week in pig-iron, at an advance of price on our last quotations. There are several buyers in the market for time bargains—indicating that a feeling exists that higher prices will rule in the spring. The makers have recently booked large orders, but are now holding out for a considerable advance. We quote the price of mixed Nos. to-day at 50s., cash.—*Feb.* 2.

MONTHLY REPORTS.

During the past month the demand for all kinds of metal was more limited than has been experienced for a long period; we have, therefore, very few remarks to make connected with the above prices current.

IRON (Welsh) has declined full 5s. per ton. Of Staffordshire the stocks, with masters and dealers, are low; and, consequently, they have not been disposed to sell at the late reduction—which, it is supposed, will not be carried out, as most of the makers have compromised with the men out on strike for a moiety of the proposed reduction of wages. Scotch pig is firmer, and several sales were made last month at our quotations. In foreign iron and steel nothing doing.

COPPER, for which there was a fair demand until towards the close of 1847, has lately been little in request, with scarcely any taken for the East India markets, on which this metal is so mainly dependent for support. A reduction has been made of ¼d. per lb. on manufactured, and of 5*l.* per ton on unmanufactured.—YELLOW METAL SHEATHING was also reduced ¼d. per lb.

TIN (English) is not so much in request as it was about three weeks since. In foreign very few sales made lately of either Banca or Straits: the former is still held at 84s., but the latter has given way—some sales having been made at 76s. On the 28th ult., 238 slabs were offered by public auction, but none sold. The stock on hand, of both kinds,

On January 1st, consisted of ..... 520 tons.
Less, cleared for home use in January ..... 18 tons
Exported ditto ..... 4 „ } 22 „
Leaving stock on hand ..... 498 tons.

TIN-PLATES—Demand limited; but, as several manufacturers have either suspended operations, or much reduced their make, owing to the selling prices barely covering cost, the stocks are low, and prices are, consequently, firm.

LEAD has been rather brisk for the last two or three weeks—the large smelters having made several sales. No importations, except a few parcels of hard Spanish, into this port.

SPELTER.—The operations in this article were more limited in the last month than we have known for a considerable time past—scarcely 100 tons on the spot having been sold. A few parcels, for spring shipment, were placed at 19*l.* and 19*l.* 5s., which are the present quotations. The stock on hand, 1st Feb., 1847, was 2230 tons—it is now 1840 tons.

IRON.—Towards the close of the month just ended, a great and unexpected improvement took place in the demand for all descriptions of English iron; that demand seems to be on the increase, and likely to continue for some time to come. Rails, which were sold at 6*l.* 15s. per ton, early in January, are now in request at 7*l.* 5s. to 7*l.* 10s., and of bar-iron there are no stocks of importance anywhere. Price in Wales, 7*l.* to 7*l.* 5s.—nominal. Scotch pig-iron has risen to about 50s., with few sellers. Staffordshire iron is entirely nominal—the men being out, and nearly all the works at a stand-still.

ENGLISH SHEET-COPPER is lower by ½d. per lb.—other sorts in proportion. The Indian accounts do not seem to justify a hope that, even at the decline, large shipments will be made from hence.

SPELTER is easier in price, and is to be had at 19*l.* 10s. on the spot, and 19*l.* for early delivery. Stock about 1800 tons.

EAST INDIA TIN is rather lower—fine Straits square being offered at 78s., and round bottoms 76s.—In ENGLISH TIN and LEAD no change, and not much doing.

THE IRON TRADE.—Since the last quarter-day, circumstances have transpired, which induce the belief that, before another month has elapsed, the price of iron will undergo a change. We are informed, that the stocks on hand are very low, and all descriptions of manufactured iron much in request. The trade, therefore, has an upward tendency; and, so far from any reduction being at all likely, a further advance may be anticipated. The puddlers and forgemen employed by Messrs. Davis and Son, of Crook Hay Forge, Hateley Heath, received orders, on Saturday, to commence work on Monday evening last, at the same prices given them previously to the strike.—*Birmingham Advertiser.*

Letters from Liverpool announce two stoppages, the parties being Messrs. Jevons, Sons, and Co., iron merchant, with liabilities amounting to 100,000*l.*, and Messrs J. and G. Campbell and Co., West India and Mexican merchants, with liabilities for 60,000*l.* Jevons and Co. were of old standing, and their suspension has taken all persons by surprise. They have been large shippers of iron to the United States; but their difficulties are understood to have arisen from losses on mining property in Wales. In one communication it is remarked—"We learn, upon inquiry, they had sufficient property to pay 40s. in the *l.*; but its realisation will take time, and, meanwhile, others must sustain serious inconvenience."

THE MINING DISTRICTS.—The latest reports received from these localities, where the population has been suffering, more or less, from the inevitable consequences of a turnout, enables us to state that matters are gradually assuming a more cheering and promising aspect, attributable to the good sense of the people themselves. At Darlaston, the colliers on strike have returned to their employment, on the reduced terms proposed by their masters; and no disturbances of the public peace are any longer apprehended—in fact, taking the district generally, wherever they have occurred, they were not owing to any systematic combination for the reduction of the rates of remuneration. At West Bromwich there is no probability of outrage, the miners being still in full work, and no notice having been given to them that there would be any diminution in their wages. The firmness displayed by the magisterial authorities, to suppress any attempts at outbreak, has, no doubt, tended to preserve life and property from the attacks of the more disaffected portion of the community, among whom are men reduced, by their own obstinacy, to mendicancy, who, far the last two years, are said to have been in the receipt of from 2*l.* to 3*l.* per week. In the neighbourhood of Hales Owen, the colliers generally have manifested such a disposition to resume their labour, that an adequate amount of work is not at present forthcoming.—*Birmingham Advertiser.*

INDIAN METAL MARKET.

BOMBAY.—Swedish bar-iron continues in demand, as does also British: in the latter a sale of a current assortment has been made at a full price, but much higher would be given for one consisting of square and round only. Of nail-rod, sheet, and hoop-iron, some sales have been effected—the prices obtained for square nail-rod and hoop being something under our last quotation.—Copper continues steady, and several sales of braziers' have been made, with one of South American, of very inferior quality—the latter just before the departure of the last mail.—Spelter, as well as steel, has further receded in value, but the quality of the latter sold is said to be inferior.—In lead or tin-plates no transactions reported, and prices are unchanged.

BENGAL.—The market for copper has been dull, and no sales could be made under present circumstances, without lowering prices considerably. Transactions are unimportant.—The value of spelter has fluctuated considerably during the past fortnight, from the operations of the native speculators, who have attracted the greater portion of existing stocks.—Iron has also undergone some decline, from the pressure of the times.—In other metals the sales have been unimportant.

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL,

FOR THE FIRST MONTH OF 1847 AND 1844,

Metals.	1848.	1847.	*In.* in 1848.	*Dec.* in 1848.
Spelter .....*Tons*	2	11	—	9
Copper	206	333	—	127
Iron, British	798	343	455	—
Ditto, foreign.....	—	52	—	52
Tin-plates .....*Boxes*	269	275	—	6
Lead .....*Tons*	10	27	—	17
Steel	5	59	—	54
Quicksilver..... *Bottles*	—	—	—	—

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Adair's Main 16 6—Dean's Primrose 16 3—Dipton Tanfield 14 6—Hasting's Hartley 20 6—New Tanfield 15—Ord's Redheugh 17—Original Tanfield 14—Wylam, 17 6—Wall's End Bewicke and Co. 21 6—Brown's Gas 15 6—Harton 20 9—Riddell's 21 3—Haswell 23 6—Lumley 21—Stewart's 23 3—Adelaide Tees 22—Seymour Tees 21 6—Tees 22 9.—Ships at market, 119; sold, 24.

WEDNESDAY.—Adair's Main 16 6—Chester Main 17—Dean's Primrose 16—Dipton Tanfield 14 6—New Tanfield 15—Tanfield Moor 17 6—Wall's End Brown's Gas 15 6—Haswell 23.—Ships at market, 113; sold, 21.

FRIDAY.—Dean's Primrose 15 9—Dipton Tanfield 14—Hasting's Hartley 19—Holywell Main 18—New Tanfield 18—Tanfield Moor 17—Wall's End Brown's Gas 15—Hedley 20—Killingworth 20.—Ships at market, 151; sold, 25.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Jan. 29, was 20,618; amount of money, £85 18s. 2d.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars ....per oz.	£3 17 9	New dollars.....per oz.	£0 4 2½
„ Portugal pieces....	0 0 0	Silver in bars (standard)	0 4 11½

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	7 ..	—
512	Albert Consols.....	1 ..	2½
1024	Alfred Consols	4½..	30
256	Alternum Consols.	2 ..	15
235	Andrew and Nangiles	28½..	11½
10000	Ayrshire Iron Company	5 ..	1½
1624	Balleswidden	9 ..	18
128	Balnoon Consols.....	25 ..	25
10000	Banwen Iron Co.....	2 ..	—
1000	Barristown	4½..	10
4000	Bedford	2½..	3½
128	Besore Lead Mine....	14 ..	10
315	Birch Tor Tin Mine...	24½..	—
8000	Blaenavon	50 ..	23
100	Botallack	175 ..	80
120	Brewer.....	5 ..	7
10000	British Iron, New, regis.	10 ..	11-11½
—	Ditto ditto, scrip.....	10 ..	12
128	Budnick Consols	52½..	40
128	Burthy	20 ..	21
100	Bwich Cwmerfin	20 ..	—
128	Callestock	17 ..	30
1000	Callington	19 ..	32
20000	Cameron's Steam Coal	4 ..	5½-¼
256	Caradon Copper Mine	9¼..	1
256	Caradon Mines	22½..	17
256	Caradon United	24 ..	5
256	Caradon Wh. Hooper..	21 ..	15
1000	Carn Brea	15 ..	105
2048	Cascade.....	1 ..	2
112	Charlestown	220 ..	30
166	Cleveland.....	9 ..	5
512	Coatlithe Hill	¼..	2
1900	Combmartin	7½..	3
500	Comblawn	5½..	6
128	Comfort	45 ..	90
256	Condurrow	20 ..	31
2560	Cook's Kitchen	14 ..	2
2048	Coombe Tin Mine	4½..	2
1000	Coombe Valley Quarry	2 ..	3
1000	Copper Bottom	1 ..	1
1024	Cosheen	4½..	20
240	Craddock Moor	15½..	15
128	Creeg Braws	120 ..	100
500	Cubert Mine	12½..	15
2048	Dartmoor Consols	3 ..	2
300	D. Prior & Buckfastleigh	14 ..	26
7500	Demeiza Mines	2 ..	2
7100	Derwent	8½..	5
1024	Devon & Courtenay Con.	7½..	3
1024	Devon Great Consols..	1 ..	210-15
1000	Dhurode	2 ..	5
186	Dolcoath	30 ..	50
2560	Drake Walls	4 ..	4
10000	Durham County Coal..	45 ..	9
3000	Dyfngwm	10 ..	12½
256	East Alvenney	10 ..	25
112	East Caradon	42 ..	42
2048	East Crowndale	5½..	4½
512	East Combe Silver-Lead	6½..	6½
128	East Pool	5 ..	20
100	East Relistian	22 ..	40
—	East Wheal Albert....	1 ..	3
94	East Wheal Crofty	125 ..	280
256	East Wheal Fortune ..	2 ..	3
128	East Wheal Rose	50 ..	1150
2048	East Wh. Rough Tor ..	¼ ..	2
—	East of Scotland Iron Co.	2½..	¼
123	East Wheal Seton	14 ..	15
256	Elborough.....	1½..	2
256	Exmoor Wh. Eliza....	3½..	6
512	Fowey Consols	40 ..	45
6400	Gadair	2 ..	2
20000	Galvanised Iron Co. ..	10 ..	9½
10000	Gen. Mining Co. for Irel.	2 ..	1½
2048	Georgia Tin Mines	1½..	1½
256	Gonamena	31½..	45
128	Goonvrea	4 ..	1½
244	Grambler & St. Aubyn —		10
100	Great Consols	1000..	400
256	Great Callestick Moors	22..	25
2560	Great Michell Consols	1½..	3½
256	Great Resugga Moor ..	7 ..	12
512	Gt. Wh. Rough Tor Con.	15½..	18
100	Grogwinion	5 ..	—
256	Gwinear Consols.....	7 ..	18
1000	Harrow barrow Old Mine	8½..	2
6000	Heligston Down Con..	½..	2½
256	Herodscombe	4½..	4½
256	Herodsfoot	16 ..	18
10000	Hibernian	12½..	1½
239	Hobb's Hill	6 ..	3
1000	Holmbush	19 ..	11
827	Kirkcudbrightshire....	5½..	4½
500	Lady Elizabeth	5 ..	5
2048	Lamberooe Wh. Maria	11 ..	4
128	Lelant Consols	90 ..	60
128	Leskinnick	10 ..	5
1000	Lewis	15 ..	6½
1000	Llwyn Malees	5 ..	—
3600	Llynvi Iron	50 ..	50
256	Lostwithiel Consols ...	15 ..	15
6000	Marke Valley	10 ..	3
5000	Mendip Hills	2½..	1½
5000	Merionethshire Slate & Slate Slab Co...	1½..	2
20000	Mining Co. of Ireland	7 ..	6½
256	New East Crowndale..	3½..	3½
128	North Fowey Consols..	30 ..	30
100	North Pool	45 ..	450
70	North Roskear	10½..	310
256	North Wh. Abraham ..	1 ..	1
262	North Wh. Leisure ..	1½..	2
128	North Wh. Providence	2½..	3
15000	Northern Coal Co.	23 ..	2
128	Par Consols.....	— ..	1000
4000	Pennant	1½..	2½
100	Penrhiw	30 ..	65
1280	Perran St. George Un.	13 ..	20
128	Perran Wh. Virgin....	9½..	15
512	Plymouth Wh. Yeoland	4½..	21
256	Polsaith Consols	4½..	7
112	Providence Mines	35 ..	45
10000	Rhymney Iron.....	50 ..	20
10000	Ditto New	7 ..	6½
256	Rose Consols	10 ..	2
1000	Rosewall Hill	1 ..	5
256	Rosewarva Mines	— ..	12
—	Shotts Iron Company..	50 ..	55
2500	Silver Valley	5½..	2
1100	South Dolcoath	3 ..	2½

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
128	South Caradon	10 ..	450
256	Sth. Friendsh. Wh. Ann	16 ..	28
200	South Harvannah	10 ..	25
256	South Tolgus	7½ ..	50-2½
256	South Trelawney	20 ..	8½
128	South Yeoland	16½..	20
128	South Wheal Basset ..	110 ..	95
256	South Wh. Betsey....	2½..	5
124	South Wh. Francis....	160 ..	200
256	South Wh. Hope	— ..	5
1000	South Wh. Maria.....	2½..	2
256	South Wheal Rose.....	11½..	1
256	South Wh. Sophia.....	4 ..	4½
10000	Southern & Western, Irish	2 ..	4
280	Spearne Moor	30 ..	40
256	St. Austell Consols....	9 ..	10
94	St. Ives Consols	— ..	320
128	St. Michael Penkivel ..	5 ..	10½
999	St. Minver Consols....	1 ..	6
1000	Stray Park	43 .	17½
9600	Tamar Consols	3 ..	4
1024	Tavy Consols	4 ..	13-15
6000	Tincroft	7 ..	8
1000	Tin Vale.....	2 ..	10
128	Tokenbury	143½..	10
256	Trehane	2 ..	25
5000	Treleigh Consols.....	6 ..	3½
2000	Trenance	2 ..	50
96	Tresavean	10 ..	250
120	Trethellan	5 .	16
120	Treviskey and Barrier	130 ..	140
288	Trevean	1½..	25
128	Trewellard	12 ..	26½
100	United Mines	300 ..	350
256	Wellington Mines	15 ..	30
128	West Basset.....	45 ..	30
256	West Caradon.....	20 ..	120
128	West Cargoll	2 .	12
512	West Fowey Consols...	40 ..	15
256	West Providence.....	9 ..	25
200	West Seton	40 .	150
—	West of Scotland Iron Co.	210..	210
120	West Trethellan	5 ..	30
256	West Wh. Friendship..	9 ..	12
3845	West Wheal Jewel....	11 ..	1½
2560	West Wh. Maria.....	3 ..	1½
256	West Wheal Shepherd.	5 ..	2½
256	West Wheal Tolgus ..	21½..	5
256	West Wheal Treasury	19 ..	10
5200	Wicklow Copper.....	5 ..	12½ ¾
184	Wheal Adams	51 ..	10
1000	Wheal Agar.....	— ..	10
256	Wheal Albert	10 ..	8
128	Wheal Acland.....	13 .	2
256	Wheal Allen	2 ..	5
237	Wheal Anderton.....	18 ..	22
128	Wheal Ann	— ..	50¼
512	Wheal Ann, Bridford..	1 ..	2
512	Wheal Anna Maria....	— ..	5
1024	Wheal Ash	4½..	8
120	Wheal Bal	5½..	20
2560	Wheal Barbara	1½..	4-5
256	Wheal Benny	10½..	6
256	Wheal Blencowe	21 ..	8
256	Wheal Bucketts	20 ..	5
256	Wheal Calstock	3 ..	8
136	Wheal Clifford	190 ..	190
1024	Wheal Coad	½..	5
128	Wheal Courtenay	— ..	20
6000	Wheal Curtis	2½..	2½
256	Wheal Dyke.....	12 ..	13
256	Wheal Fortescue	6½..	5
512	Wheal Fortune Consols	3½..	6½
2048	Wheal Frederick.....	2 ..	2
388	Wheal Franco	27 ..	28
128	Wheal Harriet.....	45..	50
256	Wheal Jane.....	21 ..	15
256	Wheal Louisa.....	8½ .	8
112	Wheal Margaret	79 ..	250
512	Wheal Mary Ann	5 ..	17
256	Wheal Mary Consols..	38 ..	25
210	Wheal Prospect	4 ..	7
120	Wheal Reeth	27 ..	80
128	Wheal Rose.....	60 ..	45
2048	Wheal Samson.....	¼ ..	20
99	Wheal Seton	214 ..	1000
256	Wheal Sisters	29½..	20
256	Wheal Sophia	5½..	10
128	Wheal Spearne	10 ..	75
128	Wheal St. Ann	9 ..	15
260	Wheal Trelawney	7½..	90-5
256	Wh. Tremaine (St. Ervan)	4½..	20
256	Wheal Tremayne	35 ..	25
128	Wheal Trew.....	20 ..	21
256	Wheal Trevenna	3 ..	4
92	Wheal Tryphena.....	140 ..	265
121	Wheal Venland	29½..	30
256	Wheal Vlow (Perranz.)	½..	½
184	Wheal Vyvyan.....	— ..	60
256	Wheal Williams	6 ..	12

FOREIGN MINES.

Shares.		Paid.	Price.
5000	Alten Mining Company	14½..	4
15000	Asturian Mining Co. ..	12 ..	4
20000	Australian	2½..	3½
10000	Anglo-Mexican Co....	100 ..	2
12374	Ditto Subscription	25 ..	2½
6000	Barossa Range	½ ..	2½
3000	Bolanos	150 ..	3½
2000	Ditto Scrip	15 ..	3½
12000	Brazilian Imperial	23 ..	7-½
10000	Cobre Copper Co.	40 ..	18
8500	Colombian Co. regis...	55	1
5000	Ditto Scrip	5½	
5000	Copiapo Mining Co....	14 ..	2½
10000	General Mining Ass'n.	20 .	13½
5000	Kinzigthal Mining Ass.	2 ..	3½
20051	Mexican Company....	59 ..	—
2000	Mexican & South Amer.	7 ..	1½
5000	Mocaubas & Cocaes ..	30 ..	6
29320	{ Rl. del Monte, regis. } Ditto unregistered }	28½..	1½
	Ditto Red Debentures	— ..	10
	Ditto Black ditto	— ..	8
	Ditto Loan Notes	150 ..	60
7000	Royal Santiago	10 ..	6
2000	Pachuca Mines	4 ..	4½
11000	St. John del Rey	15 ..	6½
43174	United Mexican ...Av.	28½..	1½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

JOINT-STOCK BANKS.

Shares.	Companies.	Paid.	Div. p. cent.	Price.
22,500	Australasia	£40	£3	£15
20,000	British North American	50	5	43½
20,000	Colonial	25	5	14½
—	Commercial of London.....	20	6	20
4,000	Ionian State	25	6	24½ 25
60,000	London Joint-Stock	10	6	16
30,000	London and Westminster	20	6	25
10,000	National Provincial of England	35	5	36
20,000	National of Ireland.....	22½.....	5	19½ 19¾
20,000	Provincial of Ireland	25	8	43½
4,000	Ditto New	10	8	16½
20,000	Union of Australia	25	6	23½
10,000	Ditto New.....	2½	6	2½ 2¾
60,000	Union of London..... ..	10 . ..	5	11

GAS-LIGHT AND COKE COMPANIES.

Shares.	Companies.	Paid.	Div. p. cent.	Price.
5,000	British (London).....	£18	£1*	£17½
5,000	Ditto (country)	19	1½*	23½
1,000	City of London.....	100	10	290
1,000	Ditto New	100	10	290
4,000	Equitable	50	5	38
10,000	European	20	1½.....	18
12,000	Gas-Light and Coke Chartered Co.....	50	6	55½ 56½
6,000	Ditto New	10	6*.....	11 11½
9,000	General United Gas-Light Company ..	50	2	17½ 18½
10,000	Imperial	50	6	80½
46,400	Ditto Debentures	100	4	100
8,000	Imperial Continental	39½.....	4½*.....	54 56
7,000	Ditto New	28	4½*.....	61
84,500	Ditto Debentures	100	5	100 102
2,000	Independent	40	6	64
3,000	London	50	6	49 50
3,000	Ditto	50	5	48
9,000	Phœnix, or South London	43	5	33½
1,000	Ratcliff	80	5	80
4,000	South Metropolitan	25	6	30 32

LEAD ORES

TICKETINGS FOR 100 TONS CALLINGTON LEAD ORES, *Sold in London.*

Bidders.	*Price per Ton.*
Sims, Willyams, and Co....	£12 5 0
Walker, Parker, and Co.....	13 7 0
Newton, Keates, and Co.....	13 16 0
B. Somers	15 11 0
R. Michell and Son	15 13 6
J. T. Treffry	17 0 0
Tamar Smelting Company (purchasers).....	17 1 6

TICKETINGS FOR ABOUT 50 TONS (20 CWTS.) NEWTONARDS LEAD ORE. *Douglas, Isle of Man, Jan.* 29.

Buyers.	*Offer per Ton.*
Messrs. Walker, Parker, and Co.—Chester	£9 12 0
Tamar Smelting Company—Tavistock	8 9 6
Newton, Keates, and Co.—Liverpool.....	8 8 0
B. Somers—Bristol.....	7 14 0

Sold in London.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
Wheal Adams.....	30	£10 14 6	R. Michell & Son.

Sold at Liskeard.

Wheal Mary Ann	43	£16 15 0	B. Somers.
ditto	37	1 15 0	J. T. Treffry.

Sold at Holywell.

Penryhymblas.....	76	£10 3 0	Walker, Parker, & Co.
Westminster	45	9 3 0	ditto
ditto	15	9 12 6	Mather and Co.
Jamaica	60	9 16 0	Walker, Parker, & Co.
ditto	10	10 15 0	Newton, Keates, & Co.
Belgrave	25	9 15 0	Mather & Co.
Halkin Hall.....	6	9 9 0	Walker, Parker, & Co.
Eskerlin	90	10 11 0	J. P. Eyton.
Cairnsmore	30	8 18 0	Walker, Parker, & Co.
ditto	10	7 0 0	J. P. Eyton.
Llanbadarn	23	9 14 6	Walker, Parker, & Co.
Kilbricken	7	22 11 0	Mather & Co.
Conlig	63	9 11 0	Mather & Co.
Total tons	460		

Sold at Aberystwith.

East Logylas	80	£10 3 0	Walker, Parker, & Co.
ditto	60	10 3 0	ditto

Sold on the Mine.

East Wheal Rose.....	56	£13 14 0	B. Somers.

BLACK TIN.

Mine.	*T.*	*C.*	*Price per ton.*	*Purchasers.*
Wheal Anderton.....	2	5	£37 17 6 ..	Calenick Smelting Company.
ditto	1	15	35 10 0 ..	Williams and Co.
ditto	1	10	26 5 0 ..	Calenick Smelting Co.
ditto	0	10	16 10 0 ..	ditto
Great Polgooth	27	11	44 15 0 ..	Calenick Co. and Williams.
ditto	1	4	40 5 0 ..	ditto and ditto.

COPPER ORES.

Sampled Jan. 19, *and Sold at Andrew's Hotel, Redruth, Feb.* 3, 1848.

Mines.	*Tons.*	*Price.*
North Pool	108	£3 6 6
ditto	107	5 5 0
ditto	103 .

EAST WHEAL FRIENDSHIP MINING COMPANY,
IN THE PARISHES OF PETER-TAVY AND MARY-TAVY, DEVON.

TO BE WORKED ON THE COST-BOOK PRINCIPLE,

"Which exempts shareholders from any liability beyond the amount of their share, and enables them to withdraw at any time, and demand their portion of the value of the mine, by giving notice to the Secretary to that effect."

UNDER THE INSPECTION OF MR. RICHARD EDWARDS,
Manager of Wheal Franco, Plymouth Wheal Yeoland, &c. &c. &c.

TREASURER—WILLIAM EALES, Esq., 159, Fenchurch-street.

A Board of Directors will be chosen at the First Meeting of the Shareholders.

EAST WHEAL FRIENDSHIP is a COPPER MINE, lying next adjacent to the well-known Wheal Friendship, which has been a most profitable investment—returning upwards of £400,000 to the adventurers, and is at the present time paying large dividends. The lodes are a continuation, running through East Wheal Friendship, for which see the report, furnished by gentlemen, whose practical experience and ability in mining operations are undisputed.

REPORT OF J. H. HITCHINS, ESQ.
(Of the Devon Great Consols.)

At the mine, I met Captains Phillips and Dunn, and surveyed the whole of the sett and the adjoining property, with a view to ascertain how much of the latter it will be desirable for the company to obtain, in addition to what they already are in possession of. It appears from the measurement this day made, to ascertain the extent of the company's sett, that it is in length, from one extreme point to the other, lineally, on the course of the lode, about 600 fms., and in width, about 250 – that is the eastern side of the River Tavy; on the western side of the river, the sett is less comprehensive; the length of it being about 100 fms., and the width about 50, on the underlay of the lode. In viewing the sett generally, I have only to remark, that I consider it one possessing advantages of more than ordinary character, and as a mining investment, as good as any can be. The lode at present in the adit end, now driving east of the River Tavy, being the large masterly one of Wheal Friendship Mine, which has proved so profitable to the adventurers—from 4 to 5 ft. wide, intermixed throughout with gossan, mundic, copper, peach, prian, and all the other characteristics comprised in the term, kindly.

REPORT OF CAPTAIN RICHARD EDWARDS.
(Of Wheal Franco, Plymouth Wheal Yeoland.)

East Wheal Friendship, I find, is situated on the banks of the River Tavy, in the parishes of Mary-Tavy, and Peter-Tavy. It is east, on the course of the lodes of the Great Wheal Friendship, and the Eastern boundary of that mine is the western of this. (*Vide Plan.*) The strata, with the exception of hard grey rock, is killas, and the granite is close on the eastern boundary. Three lodes have been discovered, although they are not now open; and a shaft has been sunk on the middle one, on the eastern side of the River Tavy, on a patch of hard rock, from which some good ore was taken; and the situation of the mine is favourable to the production of copper, being near the junction of the granite and killas, and on the run or course of the Wheal Friendship lodes. It is supposed, the hard rock will disappear, as the workings are extended downwards. On the western side of the river, on the course of the middle lode, there is a very high precipice of this same hard grey rock; but, on the western side, between it and the Wheal Friendship boundaries, there is a change of ground; and, I think, if the lode were opened here, it is very probable that it would be productive. I call this part of the sett a good speculation, particularly as there is an adit already driven in at the base of the precipice, which, I understand, has reached nearly to the opposite side of the hard rock. About 80 fathoms to the north of the middle lode, there is said to be a large lode, producing stones of copper ore near the surface; this is to the north of the hard ground, and in a situation that would warrant being prosecuted.—*Horrabridge, January* 18, 1848.

REPORT OF CAPTAIN THOMAS DUNN.
(Of East Wheal Friendship.)

We first commenced driving the adit level east, when we cut a large lode, with fine stones of yellow copper ore; we then sunk an engine shaft to the depth of 50 fathoms, through a very promising lode, 10 feet wide. This lode was thought by all mining agents, to be one of the best they ever saw—yielding not less than 10 tons of mundic, tin, and copper, mixed, to the fathom. In the 20 feet fathom, the lode divided—one part going down right, the other underlaying north, about 2 feet in the fathom. I should now recommend sinking the engine-shaft deeper, when I have every reason to believe that we shall cut the Wheal Friendship lode. You can see how much we have sunk and driven by the plan sent. I can only say, it is a very good investment, and I hope you will save me a few shares. I have sent specimens (which may be seen at the office), from the lode; and there is, at least, one ton of good ore at the surface.—*Tavistock, Jan* 6.

N.B.—The foregoing reports are condensed, but the originals can be seen at the office.

East Wheal Friendship is divided into 1024 shares, deposit 3*l.* per share—2*l.* of which goes for the purchase of the sett, and for work done (vide plan); and 1*l.* into the hands of the treasurer, towards the working. Certificates, containing five shares each, will be issued to each shareholder, which must be signed by the treasurer and secretary, and no shares will be retransferred, without the delivery of the said certificates, bearing the re-indorsement of the holder. The books of the company will, at all reasonable times, be open to the inspection of the shareholders.

Application for the remaining shares to be made either to the secretary, at the office of the company, No. 48, Threadneedle-street, London; the treasurer, William Eales, Esq., 159, Fenchurch-street; Mr. James Lane, mining share agent, 75, Old Broad-street; the solicitor, C. V. Bridgeman, Esq., Tavistock; or through any respectable broker.—Reports from other mining agents can be seen at the office.

LONDON AND COUNTY JOINT-STOCK BANKING COMPANY.
PARENT ESTABLISHMENT, 21, LOMBARD-STREET.

DIRECTORS.

Emanuel Cooper, Esq.	Swynfen Jervis, Esq.
William Cory, Esq.	John Cuthbert Joyner, Esq.
James William Deacon, Esq.	Richard Springett, Esq.
William Evans, Esq.	Clement Tabor, Esq.
John Griffith Frith, Esq.	William Gordon Thomson, Esq.

John Wheelton, Esq.

General Manager—Henry Luard, Esq.

At the Annual Meeting of proprietors, held on Thursday, the 3d February, 1848, at the London Tavern, Bishopsgate-street, the following report, for the year ending 31st Dec., 1847, was read by the secretary:—

JOHN GRIFFITH FRITH, Esq., in the chair.

REPORT.

Your directors, in presenting to the proprietors their annual report, can refer with much satisfaction to the continued prosperity of the bank.

The extreme monetary pressure of the past year imposed upon your directors the necessity of great caution. They felt that a responsibility rested upon the London and County Bank to grant with liberality the banking accommodation required by its numerous connections; and they trust that the extensive interests comprised within the range of its branches were relieved by the free, but prudent, use of the large resources at their disposal from the inconvenience so generally felt throughout the United Kingdom.

During the severity of this pressure, your directors were called upon—owing to the failure of a private bank at Abingdon—to offer their aid to that important town and neighbourhood, which was gratefully accepted, and a branch bank has been established at that place, which promises to be a valuable accession to the business of the company.

Your directors are gratified in being able to state, that the losses incurred by the bank during the past year have been unusually small; and although, in common with other banks, the financial statement shows a considerable reduction in the amount of customers' balances—arising not only from the general depression of trade, but from investments induced by the low prices of public securities—yet the increased current rate of interest has enabled your directors to report a profit nearly equal to that of last year. Your directors, therefore, can recommend to the proprietors that a dividend, at the rate of 6 per cent. per annum (free of income tax), be declared for the past half-year; and that—after payment of expenses, and providing for bad and doubtful debts—the balance of £864 11s. 3d. be carried to the guarantee fund, which will then amount to £25,616 6s.

Wm. Hawes, Esq., your late chairman, retired during the past year; and Wm. Gordon Thomson, Esq., has been elected to a seat on the direction.

The directors retiring from the board by rotation are, Wm. Cory, Esq., J. W. Deacon, Esq., and Clement Tabor, Esq., who have each given notice of their intention to become candidates for re-election.

John Donkin, Esq., one of the auditors, also retires by rotation; and, being eligible for re-election, offers himself accordingly. Your directors regret that your other auditor has been prevented from attending to the recent audit by a family bereavement, and suggest that a third auditor should be appointed.

BALANCE-SHEET OF THE LONDON AND COUNTY BANKING COMPANY, 31ST DECEMBER, 1847.

Dr.

To capital	£200,600	0	0
Reserved fund	24,751	14	9
Customers' balances, &c.	1,325,120	4	0
Net profit for the half-year, after payment of £9781 15s. for interest to customers	6,882	11	3
Total	£1,457,354	7	0

Cr.

By cash in hand	£268,822	8	10
Securities, discounted bills, &c.	1,140,389	7	3
Bank premises, freehold and leasehold	28,827	16	10
Preliminary expenses, expenses of establishing and purchasing branches	18,814	14	1
Total	£1,457,354	7	0

Profit and Loss Account.

To half-year's dividend, at 6 per cent	£6018	0	0
Balance carried to guarantee fund	864	11	3
Total	£6882	11	3
By net profit for the half-year	£6882	11	3

I, the undersigned, have examined the foregoing balance-sheet, and have compared the items it comprises with the several books and vouchers relating thereto, and have found the same to be correct. (Signed) JOHN DONKIN, Auditor.

London and County Bank, Jan. 28, 1848.

The foregoing report having been read by the secretary, the following resolutions were severally proposed and unanimously adopted:—

1. That the report be received and adopted, and printed for the use of the proprietors.
2. That a dividend, at the rate of 6 per cent. per annum, be declared upon the capital stock of the company, clear of the income tax, for the past half-year, payable on and after Monday, the 14th day of February inst.
3. That the balance of 864*l.* 11s. 3d., remaining to the credit of the profit and loss account, be carried to the guarantee fund.
4. That the thanks of this meeting be given to the directors, for the able manner in which they have conducted the affairs of the company during the past year.
5. That the thanks of this meeting be presented to the auditors of the company.
6. That John Donkin, Esq., John Henry Lance, Esq., and Abraham John Valpy, Esq., be elected auditors for the current year.
7. That the thanks of this meeting be presented to Henry Luard, Esq., the general manager, the inspector, the Secretary, the respective Branch Managers, and the Accountant, for the zeal and ability with which they have discharged the duties of their offices.

The ballot for the election of three directors having been proceeded with, the following gentlemen were unanimously elected:—William Cory, Esq., James William Deacon, Esq., and Clement Tabor, Esq. (Signed) JOHN GRIFFITH FRITH, Chairman.

The chairman having left the chair, it was unanimously resolved,—

That the thanks of the meeting be given to John Griffith Frith, Esq., for his able and courteous conduct in the chair. (Signed) EMANUEL COOPER.

Extracted from the minutes. (Signed) R. P. NICHOLS, Secretary.

LONDON AND COUNTY JOINT-STOCK BANKING COMPANY.—Notice is hereby given, that a DIVIDEND, at the rate of 6 per cent. per annum, on the capital stock of the company, for the half-year ending the 31st of December, 1847, will be PAID to the proprietors, either at the Parent Establishment, 21, Lombard-street, or at any of the company's Branch Banks, on and after Monday, the 14th day of February inst. By order of the board,

21, Lombard-street, Feb. 3, 1848. HENRY LUARD, General Manager.

SILVER VALLEY MINING COMPANY.—At a Special General Meeting of adventurers, held at the offices of the company, 44, Finsbury-square, on Wednesday, the 2d inst.,

RICHARD HODGSON, Esq., in the chair,

The following resolutions were agreed to:—

Resolved,—That the tutwork operations be confined to driving the 50 fathom level west, and setting such ground on tribute, as can be done to advantage.

Resolved,—That a meeting be called for the 3d March, to take into consideration the abandonment of the mine.

Resolved,—That the thanks of this meeting be given to the chairman and directors, for their exertions in conducting the affairs of this mine. R. HODGSON, Chairman.

NOTICES TO CORRESPONDENTS.

It will at all times save much trouble, and frequently considerable delay, if communications are simply directed—

TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

Also, to avoid trouble, POST-OFFICE ORDERS should always be made payable to WILLIAM SALMON MANSELL, as acting for the proprietors.

*** We should feel obliged to all pursers, captains, or adventurers, to forward particulars of meetings, &c., of the mines with which they may be connected, on the earliest opportunity, that they may be published in the Journal with as little delay as possible.

"J. W." should address his communication to the *Mechanics' Magazine*: we are not able to devote space for lengthy mathematical solutions.

If "E. J." (Pool), who addressed us respecting Knight's Refined Chain Iron, will forward a letter to our office, stating the particulars he wishes to obtain, we will transmit it to the parties.

HYDRAULIC TELEGRAPH—"S." (Moorgate-street).—We, too, have heard that Mr. Wishaw was the first to suggest this system of telegraphic communication; but we are not aware whether he has any connection with the company recently formed for introducing Mr. Jowett's patent. Mr. Wishaw was, until very lately, attached to the Electric Telegraph Company.—*See* a letter on the subject, in another column, from Dr. Murray.

"Z." (City).—If you are in possession of any particulars, on which we can found remarks, or cause inquiry to be made, we shall have pleasure in directing our attention to the subject—otherwise, it is a matter in which the shareholders only can interfere.

"Viator" (Lloyd's).—The paper on the Electric Telegraph will be acceptable.

HOLYFORD MINING ASSOCIATION—*Erratum.*—In our report of the proceedings of this association, in last week's Journal, at the commencement of Capt. Lyle's letter, it is stated, that the "Old Forge lode is 6 *inches* to 1 foot wide;" it should be "6 *feet* to 1 foot wide."

MELLING'S IRON BAR-TWISTING MACHINE.—We shall give an illustrated description of this invention in our next Number.

TIN VALE.—"M. T." (Liskeard).—The temporary offices of this company are, 17, Dorchester-place, Blandford-square. Our correspondent is too late, we know—all the shares have been allotted some time since, and hence the premium they now command. There are only 1000 shares, or 2*l.* each.

Received.—A Constant Reader (Plymouth)—J. M. (Battersea)—J. H. M. (Edinburgh).

We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses; not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

Glossary of Mining Terms.

In the Journal of the 22d January, we published the Glossary of Mining and Smelting Terms, as far as we were enabled to procure them: in our next Number we shall give the South Staffordshire Mining Terms, and some additions to those of Cornwall, with which we have since been favoured by correspondents—and shall have much pleasure in adding future contributions.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, FEBRUARY 5, 1848.

The recent visit of the Lords of the Admiralty to Portsmouth—a place which may be justly called the chief, and the metropolitan, naval arsenal of the United Kingdom—is just at this moment a circumstance of somewhat peculiar interest and significancy. The visit was one of general inspection; but their lordships' notice was most particularly directed to a capacious basin, all but completed, for the reception of the increasing steam navy of these islands. This is that arm of our national defences whose enlargement is, perhaps, more than any other, made necessary by the circumstances of the times, and the attitude of our European rival. Steam will, undoubtedly, be a first-class weapon in the hands of those who grasp the thunders of the next war. It will be one of the sharpest and most fatal arrows contained in the pregnant quiver of the belligerant nations. We would gladly see the energies of this magnificent agent stored up within the arsenals of our coast, in greater abundance and variety, than they are, or can be, laid up in the fortified places of any other country the sun shines upon. It is simply preposterous for the drowsy lion to roar out, *I shall be ready when wanted.* Most certainly he will not be ready, if he sleeps away all the interval of peace. But it is less in reference to points of this description than to that increasing multitude of the mechanical arts, which steam is daily laying under contribution, that we wish to view the peculiar naval facilities which are now in course of accumulation in Portsmouth harbour. The shipbuilder, the engineer, the machinist, the artisans in iron, steel, and brass, will have their particular branches of industry perfected and enlarged. And thus those great works of peaceful and of practical utility, which make more for the glory of a nation than all her heaped-up treasures, or her public triumphs, will be brought out to enrich the generation now living, and to be the inheritance of that which is to follow.

It is, at length, happily in our power to say, that the tide of commerce, which had ebbed out into such shallows, is once more turned, and flowing into those long-accustomed channels which had become comparatively dry and exhausted by its absence. The uniform language and testimony on 'Change is, that things are decidedly better—that is to say, not only better in the fulness of the money market, and the freeness with which discounts are everywhere attainable, but better in the sense of bargains actually completed, and business done. Not that the spreading sunshine of the week has been without its dusk of occasional shadows. The tidings from Calcutta are, as far as they go, depressing. The long fever fit experienced here has shaken, sympathetically, the City of Palaces. But in this instance, also, the worst is ascertained, and is now, fortunately, past. Concurrently with the knowledge of the unpropitious turn in the state of our eastern commerce the funds have continued heavy, and, probably, will continue so, till the financial prospects of the country, as well as the purposes of Government, are more fully apparent. It may be reasonably expected that, out of the fulness of the money accumulation now existing, those branches of industry, those classes of public undertakings, which have been either checked or suspended during the lately prevailing scarcity of money, will now be assisted to move on with a vigour adequate to their importance. If railways are again set in motion, not with the headlong speed, or the reckless precipitation, of 1846, but with such measured and calculating circumspection as a sound judgment and a just view of the value of such works will suggest, the fulness of occupation, and the activity of domestic trade, directly resulting, would be felt throughout every corner of this languishing island.

We trust we are on the eve of a prudent and well-considered acceleration of our progress in this particular, and that the great mining population of England and Wales will reap the weekly benefit of our improved spirit and activity. It will be seen that, in several instances, mining shares have improved in value, and that the sales for the week are more than for the week preceding. There is, in fact, much to rejoice at, and we may add, with great confidence, much more—which we are, to all human appearances, on the point of realising, to our great benefit and satisfaction.

THE IRON TRADE IN FRANCE—THE HALLETTE FOUNDRY AT ARRAS.—We stated, in a former Number, that this celebrated establishment, founded by the late M. Hallette, was to have been put up for sale on the 16th Nov. last; but, subsequently, that arrangements had been entered into by a company to carry it out on a larger scale, among whom were several English capitalists. Some little opposition has occurred on the part of those interested to the contemplated enlargements, until the measures intended to be brought forward by the Ministers of Finance and Commerce, in the Chamber of Deputies, were known, as to how far the Government intended to modify the tariff, as regards the duties on the importation of foreign coal and iron into France; before such improvements were made, the consequence is, that although the deed of partnership is drawn up, it is not yet ratified by the signatures of the respective parties. This delay in its ratification has, as a matter of course, greatly retarded the progress of the works, which have only continued to finish the contracts entered into by M. Hallette previous to his death—viz.: the engines for the *Eumenide* and *Gorgon* steamers, of the Royal Navy, of 200-horse power each, and minor locomotives, tenders, and wheels, for the Montereau and Fruges Railway, which has thrown a great number of men out of work. The present state of the railways throughout France has been represented most urgently to the Minister, as they are completely at a stand still for the want of locomotives and the necessary *materiel* to proceed with, as the directors of the different companies will not submit to the exorbitant prices of the monopolising iron and forgemasters, and had sooner stop the works—the consequence is, that some hundreds, even thousands, are out of employ; whilst to the shareholders, who have invested nearly the whole of their means, it is most ruinous, they are obliged to sell at a considerable loss, if they want to raise money. The only paying lines at present, are the Paris and Orleans, Rouen and Havre, and Strasburg—whilst the Great Northern Trunk Line, from Paris to Arras, Lille, Valenciennes, to the Belgian frontier, is so far a losing speculation, that at the last meeting it was announced, that no dividend would be paid for the present, but appropriated towards the maintenance of the line; the same may be said of the Amiens and Boulogne Railway, which is still unfinished for the want of material and funds, to lay out at the high price rails are charged at this moment. The *projet de loi* in the Custom duties, which the Minister proposes to lay before the Chambers, is, therefore, looked forward to with the greatest interest by a most extensive portion of the capitalists and small proprietors throughout France, whose funds are invested in railway speculations, and nothing but a great reduction on the importation of British and Belgian coal and iron will save from total ruin. The ironmasters and coal proprietors await with great anxiety the intended measures of the Government, and are striving with all their might to oppose them both in and out of the Chamber; but the crisis has arrived, when the Minister must be firm, he must either succumb to the intrigue and power of the oppressive and extorting monopolists, or triumph over them, by doing justice to the industry and interests of the nation at large, by the alteration of those duties, which for years have been so prejudicial to the advancement of French commerce with other nations.

THE BRITISH AND FRENCH NAVIES.—The progress that steam navigation has made during the last quarter of a century, not only in this country, France, and Austria, but even in the Russian navy, has caused an extraordinary development to machinery, and the employment of iron in shipbuilding, which was looked upon formerly as a chimera, or an impossibility, but which British industry and science has turned to the greatest advantage, not only in a naval, but a commercial point of view. The various steam navigation companies that now exist in this country—the General Steam Navigation, which may be said to claim the northern parts of France, Belgium, Holland, Hamburgh, and Scotland—the Peninsular and Oriental, the coast of Portugal, Spain, the ports of the Mediterranean and the Levant, Alexandria, Suez, and the Red Sea, from Bombay to Calcutta, the capital of our Indian empire—the Royal West India Mail Company, the whole of the British and foreign colonies in the west, and the Gulf of Mexico—whilst the South Pacific Steam Company extends from Panama, Callao, and the whole of the western parts of South America to Valparaiso, the chief port, or Liverpool, of the flourishing republic of Chili—and thence comes the Royal North American Company, from Liverpool to Boston and New York, the vessels of which are the admiration of every foreign power for their symmetry of structure, convenience of accommodation for passengers and merchandise, but particularly solidity, and their superior machinery. Besides the above, there are also many minor vessels of other companies between the ports of England, Scotland, Ireland, and Southampton to Guernsey, Jersey, &c; the whole forming the largest merchant navy in the world, affording the greatest facilities to the commercial intercourse between this country and every point of the globe, but to the development of mining enterprise throughout the whole of the southern and western hemisphere. According to the official returns, the Royal Navy of Great Britain consists of 678 ships of war, either in commission, ordinary, or building, carrying from 1 to 120 guns each—of which number 150 are armed steam-vessels, from 100 to to 850-horse power—employing, in time of peace, 40,000 able-bodied seamen, 2000 boys, and 14,000 royal marines. Many of these steamers are constructed of iron. The naval force of France is 216 ships of war—55 of which only are steamers, employing 28,000 seamen. The state of the French steam navy is now under the consideration of the Duke de Montebello, the Minister of Marine, and a special commission; and during the present session a *projet de loi* will be presented, for allowing the importation of British cast and sheet-iron for shipbuilding, to be admitted at a moderate duty.

NEW ERA IN STEAM NAVIGATION.—In the *Washington Union*, of Jan. 5, is a long report, from a board of professional engineers and others, appointed by the Secretary of the Treasury, to test an important improvement in the construction of naval steam-engines, the invention of Capt. Ericsson. There appears to be an apparatus called an evaporator, and another a condenser, conveniently arranged amidst the machinery, so as to occupy very little space. By this the steam, after performing its work, is converted into water, and forced back into the boiler—again and again taking the same routine. As some of the steam will always be lost by loose joints, the evaporator supplies the deficiency from the element in which the vessel floats, and from this increased supply of steam, the condenser affords any desired amount of fresh water. The whole is said to be complete and perfect, and the following results attained:—1. A steamer may go to sea, and complete her voyage, without ever having one particle of salt water in her boiler, if she will begin it with fresh water.—2. She need not carry any tanks of fresh water, but can make it from the sea at will; thus saving the space for fuel.—3. Besides the supply for the boiler and culinary purposes, enough fresh water can be made to allow each sailor a bath every day, the supply may be so ample.—4. The fires need never be extinguished to relieve the boilers of salt, or mud, as neither salt nor mud will ever get in; thus saving fuel.—5. The boiler will require little or no watching; being once arranged, the machinery will do the rest, and keep up the exact supply of pure water.—6. A boiler at sea, especially in the Gulf of Mexico, will last two or three times as long as at present, as no impurities will be admitted there, any more than on the lakes.—7. Nearly one-fifth of the fuel will be saved, as the heat will act on the plates and flues, free of incrustations from salt or mud, and the water from the condenser, while very hot, will be pumped into the boiler.—8. A low-pressure engine will answer on the Mississippi and Missouri, as well as on streams of clear water, as the muddy water will be evaporated, the vapour recondensed, and forced into the boilers as clear as crystal.—9. The awful bursting of boilers, so often occurring on the western waters, may be arrested *in toto*, as the saving of fuel, and the equal adaptation of the low-pressure engine, will induce its substitution in lieu of the powder magazines, as the engines now in use may be called.—10. The oil used around the piston of the cylinder, and the rust on the boiler, may impart a little of their taste at first to the steam and water; but a very simple filter will make it as pure as when distilled in the chemist's laboratory. Should these results be obtained, it must be admitted that the invention will reflect credit, not only on Capt. Ericsson, and the secretary, who has developed its advantages by his experiment and adoption, but on our country, and prove most advantageous to all who are interested in steam navigation.

THE CURRENCY.—On the 21st December last, Mr. M. M. Pattison, of Glasgow, addressed a communication to the Editor of the *North British Mail*, and which has since gone the round of the press, recommending the Government to secure for the country a permanent, unfluctuating, and more valuable currency than gold, by advancing one-third of the capital for completing the unfinished lines of railway, to the extent of 50,000,000*l.* sterling, to be managed by directors, consisting of one-third of their appointment, and two-thirds by the shareholders. That they then issue 50,000,000 of "Victoria Railway Sovereign Notes," bearing interest at 2½ per cent. He has since followed up the subject: he states—"Were the dividend on the proposed currency restricted to 1½ per cent.—a premium sufficient to ensure its superseding gold—and were the average dividends from the railways to realise only 4½ per cent., there would be left at the disposal of Government an annual fund of 3 per cent. on 50,000,000*l.*, or 1,500,000*l.*, which, if applied to the reduction of the tea duties, would be equal to a reduction of 30 per cent. on the duties levied last year on that commodity, and would confer an incalculable boon on our India trade, and be the means of *doubling* the amount of our export manufactures to that market." The following is his statement, showing the annual saving to the country, from the issuing of 50,000,000 of "Victoria Railway Sovereign Notes," to replace the same amount of gold currency:—Amount of annual loss from *wear* and *tear* and *sweating* on 50,000,000 of gold sovereigns, estimated at one sovereign in the 300, is 166,666*l.*; add 3 per cent. interest on the cost of 50,000,000 of gold, is 2,500,000*l.*; add 1½ per cent. dividend to be allowed, and the 50,000,000 of Victoria Railway Sovereign Notes, 750,000*l.*; add excess of railway dividends over the 1½ per cent. provided for the dividends on the Victoria's, taken at 3 per cent., is 1,500,000*l.*=4,916,666*l.* Annual saving to the country, 4,916,666*l.*, which would, in 10 years, with an annual interest account, amount to the enormous sum of 63,179,135*l.* sterling—a sum that would more than purchase the whole of the gold sovereigns at present in England Ireland, and Scotland. These facts are surely worthy of reflection and consideration. We leave our readers to form their own opinions as to how far the scheme is practical, and call attention to a similar proposition from a correspondent in last week's Journal.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

About 18 months ago, nothing was so much talked of as the mineral riches of Algeria. That magnificent French colony abounded, we were told, in iron and copper ore, and was not even deficient in coal. It was even asserted that it would enable so much iron and copper to be produced, as not only to render it unnecessary for France to make any importations, but even to enable considerable reductions in price to be effected. Algeria, in short, we were positively assured, was to become a second Wales and Cornwall in iron and copper—a second Newcastle in coal. These descriptions and anticipations were of such a glowing nature, that a myriad of companies, with capitals of countless millions of francs, were gravely concocted (on paper), to work the ores and extract the coal, enrich Algeria and France, and benefit themselves. So great, in fact, did the rage for mining speculation in Algeria become, that not only did the *Mining Journal* to allude to it on several occasions, but also to warn its readers against allowing themselves to be led away by the fiery enthusiasm of the French speculators.

Well, what has become of all this fine talk—all these great schemes—all this burning enthusiasm? Alas! all has evaporated in smoke! Like nine hundred and ninety-nine out of every thousand French schemes, the projects for exploring the mineral wealth of Algeria have ended in talk. It is a pity that talking is not the same as acting—for, if it were, the French would certainly do the greatest things of any people. I am aware that they may plead, that the reason why nothing has been done in Algeria is the unexpected "crisis," which has now existed for so many months, and which has entirely prevented any of the great mining speculations—and, indeed, speculations of all kinds—which were confidently expected to be brought before the public in the course of the present season. But the real truth is, that, even if there had been no crisis at all, and all, as was expected, the public launched into mining enterprise with the same wild enthusiasm which it displayed not long since for railways, the mineral wealth of Algeria would never have been worked on the grand scale which was promised. For, in the first place, there is very good reason for doubting that that wealth is anything like so great as we have been assured; and, in the next place, the difficulty of constructing the necessary establishments, the scarcity of fuel, the want of roads, and the cost of conveyance, would have rendered the working of the mines by no means so profitable as had been so sanguinely expected.

Whatever the mineral wealth of Algeria may be, I do not think the French will ever be able to make much of it. They are totally deficient in that skill for colonisation, and that audacious spirit of enterprise, which characterise the English; and, without colonization and enterprise, it is absurd to suppose that a colony, like Algeria, can be made to supply the woful deficiencies of the mother country in two of the principal metals. The French have now, it is true, got rid of their great enemy, Abd-el-Kader; but I would not mind risking a large bet that that circumstance will not improve the state of the colony; or, at all events, will be without marked influence on what I may call its *mineral* prosperity. To show how wofully ill-adapted these people are for mining enterprises, I will mention, that I have been assured by a gentleman, who has spent some time in Algeria, that they have actually allowed, in three or four places, iron-works, established and carried on by the Arabs, to fall into decay, although admirably situated, admirably constructed by Europeans, with abundance of ore and fuel! And let it not be supposed that they have made up for their neglect by establishing works in other places, or by working with spirit the ore which *does* exist. All they have done is, to make certain concessions of mines, and to constitute certain companies; but not one of these concessions has turned out, not one of these companies has manufactured, a dozen tons of iron or copper! Yet some of these have been in existence for years; and it is now 17 long years that Algeria has been in the hands of the French!

What makes this neglect of the mineral wealth of Algeria more extraordinary, is the fact that, as we are assured, the iron obtained from the Algerian ores bears a remarkable affinity to that of Sweden, from which the best steel is obtained, and of those descriptions of ore *France is totally deficient*. As, perhaps, an assertion it may be deemed, it will be well to prove its correctness by the translation of a paragraph from an official document, issued by the Board of Mining Engineers of the Department of Public Works:—"Foreign countries," write these engineers, "take a large part in the supply of French steel-works, and in the trade in steel destined for domestic consumption. This intervention—all proportion being maintained with respect to the quantity of matter employed by the different sections of the manufacture of iron—is more important than in that which concerns trade in iron ores, in cast-iron, and in forged-iron. France has not been able to relieve herself, therefore; because the state of things depends on a cause over which she has no control. The soil of France supplies in abundance ores destined to the fabrication of all sorts of cast-iron, and iron demanded for immediate consumption.—[By the way, is not this assertion rather too sweeping?]—The small importations of ores which take place by some parts of the frontiers arise from purely local circumstances. The importations of cast-iron, and iron, which are now made in considerable quantities, arise in no respect from the insufficiency of ores, but only from the fact, that the resources in fuel possessed by the principal groups of native furnaces, are not equal to the abundance and variety of the deposits of iron ore.—[The report might have added, that not only is there an insufficiency of fuel, but it is placed at an immense distance from the spots in which the iron ore is most abundant.]—It is quite different with respect to the manufacture of steel. Up to the present time, ores, adapted for the production of steel of a superior quality, *have not been found in France*. Such ores have only been found in a small number of beds, situated in the Austrian provinces of the Alps, in the Russian provinces of the Rhine, in several groups of iron-works in the north of Europe, and particularly in Sweden. The steel produced by means of materials exclusively native have always been of inferior quality; and to supply the kingdom with steel of superior quality, it has been necessary either to import the raw material of fabrication from the countries above quoted, or to import steel either from those countries, or from others which, like England, obtain their raw materials therefrom."

Though I have expressed surprise at the manner in which the French neglect to turn to account the minerals of Algeria, it must not be supposed that I have changed any of the opinions previously expressed as to the improbability of Algeria ever being at all likely to supply iron, or copper, or coal, in large quantities to France. On this point I think the same now as I thought months ago. I repeat that, in my opinion, Algeria does not possess the immense quantities of iron and other ores which the French say that it possesses; and if it does, there are so many obstacles to their being worked, as to render them almost useless. At the same time it would be absurd to deny that the colony does not contain considerable quantities of good ores. So far from denying it, I am convinced that, if the colony were in the hands of the English, they would long ago have turned the ores to account. The very Arabs themselves did so, though little better than hordes of wandering savages. But the French are not to be compared to the English, and they are even surpassed by the Arabs.

Having mentioned steel, recalls to my mind the absurdity of the French tariff with respect to that article. Though France produces no ores fit for the production of steel of a superior quality, she yet fixes a heavy duty on the importation of the superior qualities of steel. The consequence is, that she condemns her people to use bad steel, or to do without it altogether. Anybody who has been in France for six months, can bear witness to what wretched rubbish all articles in steel are. Knives, razors, scissors, for instance, are utterly abominable. So bad are they, that even the French would not buy them, unless they were deluded into the belief that they were English. French shopkeepers call all their knives and razors English; and even the cutlers, in many cases, have the impudence to mark them "Sheffield," and sometimes even to put the name of a Sheffield house on them.

The past week has been very dull in the mining world. There are, in fact, only two little items of news to record—one of them is that the Compagnie des Mines d'Aspalte de Pyrimont Seyssel has agreed to extend the period of its existence for 21 years, from 1815—the other is, that an extraordinary meeting of the shareholders of the iron-works of La Cordogne, is to be held on the 22d.

Count Kerhourt, who managed the iron-works in Corsica, has retired.

—*Paris, Wednesday.*

BELGIUM.—The recent frost has had a very destructive effect on the rails of many of the Belgian railways. On the Charleroy to Namur line, upwards of 1600 rails snapped into two in the course of a few days. The iron could hardly have been of very good quality.

In the last 10 years, the Belgian state railways have cost 600,000*l.* in rails.

The following are returns of the *exportations* made by this country during the last three years:—

		1847.	1846.	1845.
Arms	*Frs.*	4,559,246	3,832,350	3,246,269
Coals	*Tons*	1,826,988	1,355,833	1,543,472
Cast-iron—*en gueuses, &c.*		112,525	63,868	43,453
Rails		3,939	4,185	6,118
Cast-iron, wrought	*Kils.*	896,251	411,908	396,267
Iron articles—*in fer battu*		1,027,330	714,448	1,418,151
Nails		5,398,752	4,770,614	5,194,907
Machines, &c., complete, in iron		1,908,658	1,863,556	2,080,680
Ditto, in detached pieces		1,037,641	965,535	325,729
Zinc		4,812,492	4,740,094	4,345,982
Ditto—*lamine*		1,933,605	1,350,785	1,280,475

The arms were exported to the Zollverein, the Netherlands, France, Turkey, United States, Brazil, &c.; the coal to France and the Netherlands; the cast-iron, *en gueuses*, to the Zollverein and France; the rails to the Zollverein; the wrought cast-iron to the Zollverein and the Netherlands; the articles in iron to the Zollverein and the Netherlands; the nails to the Hanse Towns, the Netherlands, Austria, Turkey, Brazil, and other countries; the machines, &c. (complete), to Russia, the Zollverein, the Hanse Towns, the Netherlands, France, Spain, Austria, and other places; the detached parts of machines to the Zollverein and the Netherlands; zinc to France; and the zinc *lamine* to the Hanse Towns, Netherlands, England, France, United States, and other places.—*Brussels, Tuesday.*

IMPROVEMENTS IN THE APPLICATION OF STEAM-POWER.

[Specification of patent, dated 29th July, 1847, granted to John Hastie, for improvements in the application of steam-power to turn certain kinds of mills, or machines, with a continuous rotary motion.]

This specification is a very lengthy, and accompanied by several, sheets of drawings; nevertheless, the following brief description will be sufficient to afford the readers of this Journal a complete exemplification of it, as it is anything but complex. It is well known to most persons, even such as are not scientific, that the machinery hitherto employed in mills, whether employed for grinding flour, bark mills, &c., and many other machines, which require to be turned with a continuous rotary motion, has been very complicated and expensive; and that the machinery has necessarily occupied a large amount of space, which might otherwise have been more advantageously employed. The intention of this invention is, to simplify the machinery employed for such purpose; and, by a very simple and ingenious arrangement of the several parts, to cause it to occupy considerably less space than the machinery hitherto employed. This is effected in the following manner:—The patentee places a cylinder in a horizontal position, and supports it by standards, firmly fixed to the floor of the mill; within this cylinder, there is a piston—such as is commonly used in the cylinders of steam-engines generally—and the piston-rod works through a stuffing-box in the cylinder lid, and in a guide hole, placed at some distance therefrom; connected to this rod by a pin, is a connecting rod—the opposite end of which is coupled to a double crank, fixed upon, or formed out of, an upright shaft; the lower end of which is supported by, and works in, a step; and, at the upper end of this shaft, there is keyed a spur-wheel, which gears into three or more pinions, according to number of pairs of grinding-stones employed—the shaft upon which these pinions are fixed being connected to the moveable stones. There is an eccentric placed upon the upright shaft, immediately above the double crank—such eccentric being employed for actuating the slide valve, which, in this instance, is placed upon the top of the cylinders; in all other respects, it is similar to the slide valves in known and common use; a fly-wheel is keyed upon the upright crank shaft for passing the null points of the crank; and there is a governor affixed to the engine to regulate the speed thereof; this comprises the whole of the invention, except a trifling modification in the construction of the connecting rod. The patentee states, in the concluding part of his specification, that, having described his improvements, he declares that the new invention, whereof the exclusive use is granted to him by letters patent, consists in the simplified mode of applying steam-power to turn corn-mills, bark-mills, and other mills, which operate by continuous rotatory motion of vertical axes; also, grinding-mills with grindstones, paper-mills, and other mills, which operate by continuous rotatory motion of horizontal axes—this simplified application being in either case performed by a direct action of the piston-rods and connecting-rods, or of the piston-rods, of the steam cylinders of steam-engines upon the pins of cranks, formed or fastened upon the said vertical or horizontal axes of the mills, or machines, with suitable fly-wheels and eccentrics, which axes, according to the usual construction of steam-engines, form part of the steam-engines by which the mills, or machines, are turned; but, according to this simplified mode, the same revolving axis may be considered as forming part of the steam-engine, and also as forming part of the mill, or machine, because it is made to serve the purpose of both.

Patent-office and Designs Registry, 210, Strand.

IMPROVEMENTS IN THE MANUFACTURE OF OIL.—A patent has been obtained by Mr. Joseph B. Wilks, of Chesterfield-park, Essex, "for improvements in the manufacture of oil from certain nuts, from which oil has not been before manufactured, and producing a vegetable substance; and the application thereof for the purpose of affording light, and other uses."—This invention consists in certain processes for extracting oil from that kind of nut which is known as the Brazil nut, and for separating the stearine from such oil. The Brazil nuts are first ground or crushed, by means of edge-stones, in order to break the shells, and allow of the portions of the kernels being separated from them; which separation the patentee effects by sifting the pulverized or crushed mass in a "sifting-tackle," with upper and lower sieves; the upper sieve having six wires to the inch, and the lower one 12 wires to the inch. The pulverised kernels, after being separated from the shells, are subjected to pressure, in layers, between woven fabrics, or in bags, in the same manner as fatty matters are commonly pressed (the patentee preferring to employ hydraulic presses, heated by steam); and the oil obtained by this operation is bagged, to separate the stearine therefrom. The oil is suitable for lubricating machinery and other purposes; the stearine may be employed for the manufacture of candles, and for similar uses; and the residuary products for feeding cattle and manuring land. The patentee claims the subjecting Brazil nuts to processes of grinding or crushing, and of pressure between surfaces of woven fabrics, so as to obtain oil, and also stearine.

IMPROVED LOCOMOTIVE ENGINE.—Mr. Edward Slaughter, of the Avonside Iron-Works, Bristol, has obtained a patent for improvements in locomotive engines. In describing this invention, the *Patent Journal* says:—"The specification relates to the construction of locomotive engines, and is divided into two heads—first, the construction of the driving axle of the locomotive, and the mode of attaching the driving wheels thereto, whether as applied to locomotive engines having outside cylinders, or to those with inside cylinders. The patentee, in place of hanging or fixing the wheel upon the cylindrical part of the axle, hangs or fixes it upon the crank-arm itself; by this arrangement and mode of fixing, the crank-pin is brought close to the boss of the wheel, which, in locomotive engines constructed with cylinders, the centres of which are inside the plane of the wheel, enables the boilers to be placed lower or nearer to the axle. If this arrangement is applied to locomotive engines constructed with the centres of the cylinders outside the plane of the wheels, the driving wheel is then hung upon the inner arm of the crank. The advantage attending this mode of construction is, that both inside and outside bearing can be given to the axles, without encroaching or trespassing upon the space inside the wheels, and thereby materially increasing the steadiness of travelling of the engine, by reducing the amount of oscillations, as also the great wear of the journals of the axles, when only inside bearings are used; the axle is also considerably increased in strength by this mode of affixing to the wheels. The patentee states, that the wheels may be constructed in any of the usual known methods, whether with the bosses made of cast-iron or of malleable iron, but to be made in such manner that the boss may suit for the reception within it of the crank-arm of the axle. The second improvement is in the application of four steam-cylinders in the construction of locomotive engines. In this arrangement of the patentee, the cylinders are placed horizontally, as usual—two being within the plane of the wheels, and two without the plane. The centres of the cranks are represented in the drawings accompanying the patentee's specification, to be opposite to each other. By this arrangement, and the employment of four steam cylinders, the patentee states that the steadiness of the locomotive is very materially increased. The patentee claims as of his invention:—First, the mode of placing the arms of cranked axles within the nave or boss of the driving wheels of locomotive engines as described. Secondly, the mode described of constructing locomotive engines, by employing four, instead of two or three, steam cylinders, for the purpose of giving increased power and steadiness, and diminishing the oscillations of the locomotive engine."

At the request of the Spanish Government, M. Bonnard, Inspector General of the French Marine, was, some short time ago, sent to Spain, to render his services to that country. A fresh application has been made from Madrid, within these few days, for two more engineers of the marine to be employed in the establishment, at one of the ports of the Peninsula, of a school for maritime engineers, similar to that at Lorient; and it said that, in compliance with this request, two such engineers will very shortly be sent.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY ... Barwen Iron Company—offices, at Twelve.
TUESDAY ... Tavy Consols Mining Company—Central Hall, Plymouth, at Twelve.
Legal and General Life Assurance Company—offices, at One.
WEDNESDAY ... Arigna Iron and Coal Company—offices, quarter past Two.
Vale of Neath Railway—offices, at Twelve.
Rock Life Assurance Company—London Tavern, at Twelve.
Amicable Society—office, at One.
THURSDAY ... Hibernian Mining Company—offices, at One.
Chiantla Mining Company—offices.
European Gas Company—offices, at Two.
British Rock and Patent Salt Company—offices, at One.
East Indian Railway—London Tavern, Twelve for One.
FRIDAY ... Copper Miners of England Company—Radley's Hotel, Blackfriars, Two.
London, Brighton, and South Coast Railway—London Tavern, at One.
SATURDAY ... Copper Miners of England Company—offices, at Two.
Taw Vale Railway and Dock Company—London Tavern, at Twelve.
Harrowbarrow (Old) Mining Company—offices, Plymouth, at Twelve.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

CAMERON'S COALBROOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.

A special meeting of shareholders was held at the offices, Moorgate-street, on Monday, January 31, for the purpose of declaring a dividend, and, furthermore, receiving the report of the directors on the general affairs of the company.

N. P. CAMERON, Esq., in the chair.

The CHAIRMAN briefly opened the proceedings of the day by stating, that the object for which the meeting had been convened, was that of declaring a dividend, after the rate of 8 per cent. per annum, free from income tax, up to 31st December last, for the past six months. This being done, it would be for the shareholders to adjourn to the second special general meeting, which had been convened for that day, when a report upon the proceedings more especially connected with the railway would be submitted.

A PROPRIETOR was desirous of knowing why the dividend, which was the previous half-year after the rate of 12½ per cent. per annum, should have been reduced to 8 per cent; and, moreover, whether the dividend so declared was out of the capital of the company, or the profits which had been realised? There was a heavy debt on the concern; and he, for one, would rather forego the dividend until that was liquidated, or that a smaller amount should be given, and the surplus applied to a sinking, or reserve, fund, to meet the obligations and liabilities of the company.

The CHAIRMAN, in reply, stated, that the amount appropriated to dividends solely arose from the profits of the company; and, in answer to another proprietor, as to whether the expenses of office and management had been deducted from the returns, or placed to capital account, stated, that the expenses had been regularly charged; and he had only further to state, that the accounts had been passed by the auditors.

Mr. STRELLEY, as one of the auditors, begged to observe, that he, with his coadjutor (who, he much regretted, was absent on the present occasion), had carefully examined the accounts and the vouchers produced. There were, he admitted, certain charges passed to capital account; and these were fully justified, as, indeed, he felt would be readily admitted by any gentleman of business habits; at the same time, he had no hesitation in stating, that the whole of the expenses of the office, and the management of the affairs of the company, were regularly charged, except 1-14th per cent., which was carried to the general, or plant, account.

A general conversation ensued, involving more than one subject, being discursive in its nature—one shareholder proposing that accounts should be rendered antecedent to the day of the meeting being held, which, in the end, was assented to by the chairman, with respect to the parliamentary, or annual, meeting, there being no compulsion at the semi-annual meeting—while another shareholder exclaimed against the amount of preliminary expenses, amounting to 10,000*l.*, or thereabout, and also adverting to the debt of 75,000*l.* due by the company.

Mr. ELDERTON (the solicitor) briefly stated that the meeting was "extraordinary," and not one of a general nature, it being called for an express purpose, and that other matters were irrelevant, and, consequently, could not be legally entered upon—the accounts being only required to be made up once a year—the CHAIRMAN said the meeting was convened for the purpose of declaring a dividend; but, upon the suggestion of a shareholder, it was understood that the report should be read, which was accordingly done by the secretary, as follows:—

REPORT.

Since the date of the ordinary meeting of shareholders in July last, the directors adopted the necessary measures to proceed with the construction of the railway, by instructing their engineer to complete the plans and sections, and furnish drawings and estimates for the works, and which have all been perfected. They also advertised for tenders, and they approved of one, and were prepared to accept it, and to enter on the works, when the severe panic in the money market, which occurred in Sept. and Oct. last, was such as to induce them to defer for a time entering on the contract, or of availing themselves, except to a very limited extent, of the power given to them at the last general meeting to borrow money. Since that period, Parliament has passed a general Railway Act, which extends the time contained in the company's Act, within which to construct the line, to a period of two years further. This enactment thus secures to the company this important privilege, without the necessity and expense of applying for additional powers.

With respect to the operations at the colliery, the directors beg to observe, that under the advice of their consulting engineer (Mr. Daglish), and the personal superintendence of their local manager, they have extended and made further openings and pit room in the mines, to enable them to yield an extensive supply of coal, at such time as they may be enabled to convey the same to the ports of Swansea and Llanelly, and to avail themselves of the best of the several modes of transit that may present themselves.

The directors have also considerably increased the working stock at the colliery, which now includes, besides the engine, plant, fixtures, and machinery, a large working stock, consisting of iron, tram, wood, and water waggons, tram-plates, upwards of 2500 yards of rail switches, carts, chairs, sleepers, pit timber, and other necessary implements, capable of conducting an extensive business. Stabling, also, for upwards of 100 horses have been completed, besides weighing house, and weighing machines, smith's forge, and other buildings required for the accommodation of the company's servants in this department. An additional screen has also been erected, to facilitate the clearance of the coal. By the advice of their consulting engineer, the directors have proceeded with the erection of 40 cottages for the workmen, ten of which have been erected, and neatly finished. The company's wharf, purchased of the corporation of Swansea, is now in course of being prepared for use, and the contractor is now engaged in the construction of the quay wall, which he is bound to finish within a month from the present date. These various erections and improvements, together with the working stock, horses, &c., are of a permanent nature, and add considerably to the value of the company's property. The directors have deemed it expedient, in order to secure a continuous supply of shipping, to purchase two ships for the company's use, and to charter additional ships, from time to time, at fixed rates, as they may be required—so that the future sales of coal may not be dependant on the fluctuations and rise of freights, and a scarcity of shipping, which has been much felt for some time past, notwithstanding which the quantity of coal cut and raised during the last half-year shows an increase over the preceding half-year of between 3000 and 4000 tons. The course proposed to be adopted with regard to shipping, will besides be attended with this additional and important advantage, that, while the directors will be able to command an uninterrupted supply, they will also be able to deliver coal at the ports of discharge—viz.: London, Southampton, Portsmouth, Plymouth, Dublin, Cork, Waterford—as well as other home and foreign ports, at a considerably cheaper cost, and at more remunerative prices. Most of these several ports, as well as others, have been visited by an agent on the part of the company, who has made all necessary arrangements for the disposal of coal there, and for depôts at such places as may seem desirable.

In conclusion, the directors have to observe, that the company's coal has again been submitted to a minute test and examination at her Majesty's dockyard at Woolwich, and the result of that examination has proved, that the statements originally made to the public on these heads have been more than borne out by the recent trial, and on report thereof, the Lords Commissioners of the Admiralty have been pleased to direct the company's coal to be placed on the Government list of coal supplied by contract, for the use of her Majesty's steam-vessels. The effect of this order and permission will be, not only to enable the company to tender for Government contracts, but to extend the company's sales among public companies, contractors, and others, who are confined in their purchases to the description of coal only appointed to be included in the Government list.

From a question put to the chairman, it appeared, that no contracts had been entered into for the construction of the railway, the cost of which was estimated at 25,000*l.* to 30,000*l.* From the state of the money and the metal markets, that no measures had been taken to construct the line—while the powers lately given by the Legislature afforded them two years further time to accomplish the object; it was, however, in contemplation, on the part of the board, to form a tramway, or line, to Llanelly from the collieries, which would not exceed an outlay of 4000*l.*—the directors having purchased two vessels, for the purpose of freighting their coal (one of which the vendor had engaged to take back at the expiration of six months, should the company be dissatisfied with their bargain), and the directors had also chartered others. It was to be observed, that the directors, availing themselves of the powers given under the late enactment, would require the assent and authority of the shareholders at a special meeting, to give them the powers necessary for prosecuting this portion of the operations of the company; and hence any expense, or outlay, on this score, for the present, need not be contemplated. The chairman further, in reply to a shareholder, distinctly stated, that the dividend that day declared was out of the profits of the company, and explained, that the deficits arising on calls made were insignificant with regard to that made in Oct.; but as regarded the latter, which was only due on the 15th inst., he considered it would be unfair to draw any deduction as to the want of confidence, or ability, of the proprietors, in not responding thereto. He assured the meeting that, with the view of meeting the wishes so generally expressed, the accounts should be printed, and furnished at least one week before the next general meeting.

A question having arisen as to the terms of the Act of Parliament, the SOLICITOR stated, that the Deed of Settlement was in force, and that the shareholders were bound thereby.

Mr. TAUNTON (of Liverpool) was desirous of drawing the attention of the chairman and directors to the state of the market value of the shares of the company; here they were paying 8 per cent. dividend, and yet they were to be bought at a discount; he could not help thinking, that there was something "rotten in the state of Denmark." He was largely interested in the company, and was there as the representative of many friends, who had embarked their capital on the pleasing representations put forward. His consi-

deral, that accounts should have been rendered, to show them on what grounds the dividend was declared, and that openness was necessary to secure confidence—it was alone that want of confidence which depreciated the value of the shares. The worthy proprietor proceeded to enter upon items in the former balance-sheet, and other matters, somewhat discursive, and certainly not to the purpose, when he was called to order by the CHAIRMAN, who caused the clause in the Act of Parliament to be read He (the chairman) did not wish to withhold any information, which the directors had it in their power to afford—at the same time, he wished it to be understood, that the information so furnished, and the opportunity afforded of questions being put, must be considered as an act of courtesy, and not one of right.

Col. CAMERON expressed his readiness to afford any explanation in his power, as to the operations at the collieries; and, furthermore, having been in immediate intercourse with the board of directors, he had no hesitation in saying, that much credit was due to the gentlemen of whom the board was comprised for their earnest attention and anxiety to promote the objects of the company. It had been adverted to, in the course of the proceedings, as to the receipt of dividends on the shares held by him. He (Col. Cameron) could only say, that he had not received one farthing; and, indeed, had signed an instrument, whereby he declared that he would not receive one penny, until the 6*l.* per share had been paid up, and then to come in, *pro rata*, with the other proprietors. As regarded the 75,000*l.* due, as part of the purchase-money, it was clearly understood he should be paid out of the profits in equal proportions with the shares, or capital, of which the company was constituted—while the shares held by him (12,000) would be subject, in common with the other shares, to the payment of any calls which might be made over and above 6*l.* per share.—A question was submitted by a shareholder, as to whether the directors had received the amount allocated to them at the former meeting?—and, furthermore, whether they had regularly attended to the business of the company?—In reply to which, the SECRETARY stated, that no money had been received (except some 40*l.* or 50*l.*) by the directors—that the attendance had been generally regular; but that Mr. Jacob Montefiore, having other engagements pressing upon his time, had withdrawn from the direction, in the room of whom Mr. Hart had been appointed, who was a commercial man, and one well conversant with trading operations, and whose services would doubtless afford much benefit to the company.

Mr. TAUNTON wished clearly to understand, whether there was any liability beyond the 6*l.* per share? He was satisfied there was an under current working which was prejudicial to the company; it was, under these circumstances, that he considered it desirable all matters should be open, and above board.

The CHAIRMAN having asked, whether any other proprietor was desirous of putting a question, an inquiry was made as to who were the defaulters?—This the CHAIRMAN declined answering, inasmuch that the arrears were of late date; and he did not feel himself authorised at a public meeting to announce the names of those who might be in default—interest, he might observe, was invariably charged on all arrears of calls.

Mr. HUNT wished to ascertain what amount of any or all of the expenses incurred in the management of the affairs of the company went to capital account?—which was answered by Mr. STRELLEY, stating 1-14th, which explanation was deemed highly satisfactory by the meeting. The latter gentleman wished to impress on the directors the importance of taking into consideration the propriety of laying down a tram-road to Llanelly, instead of Swansea; the distance was less than four miles, and, by effecting this, a sale of five or six fold more could be secured; while the cost would not exceed 4000*l.*—Capt. PRICE begged to assure the hon. proprietor that the question had been well canvassed, and was now under the consideration of the board; at the same time that he expressed his satisfaction with the replies given to the several questions submitted by him.

Mr. BURLS considered, that an explanation was due as to the charge of 10,000*l.* as preliminary expenses, in the absence of which he must confess he had his misgivings as to the outlay; he considered that, if the auditors did not do their duty, and give full explanations as to the items of which the accounts were composed, that then the bill introduced by Lord Monteagle, for the appointment of an auditor independent of the company, would be a most efficient manner of accomplishing the desired end—that of acquiring information. He (Mr. B.) had visited the property, and he had no hesitation in saying, that the character given to Col. Cameron and his family in the locality, was such as he doubted not those gentlemen well merited, while it was pleasing to him to be the "auditor" of their praises. As to the quality of the coal—passing from "men to *measures*"—he must say, it was pronounced "good," and he believed there was not a second opinion as to the quality of the article.

On the subject of the purchase of vessels for the purposes of the company, a question arose, as to whether they were authorised, under the Act, to apply the capital of the company to other purposes than that of working the mines?—whereupon the SOLICITOR expressed his conviction that such might be done.

Mr. BURLS, having expressed his feelings with reference to the affairs of the company, stated, that he only felt it due to the directors to state, that since he had entered the room, and elicited the information in reply to the inquiries, he was perfectly satisfied; and with the assurance, that the accounts should be rendered in detail previous to the next meeting, would propose a vote of thanks to the chairman and directors, at the same time expressive of their entire confidence, which having been seconded, and acknowledged by the chairman, the meeting, after some slight desultory conversation, broke up.

SWANSEA DOCK COMPANY.

The second ordinary meeting of shareholders was held at the Dock Office, Quay Parade, Swansea, and continued, by adjournment, at the Town-hall, on Monday last. An advertisement signed "A C. Howden," and which emanated from the gentlemen who claimed to be directors in London, also called a meeting at the Castle Hotel, at 10 o'clock, two hours previous to the meeting at the Town-hall. Several of the Swansea directors, and other proprietors of the company attended, and remained at the Castle Hotel for upwards of an hour. To the surprise of every one, however, none of the London gentleman appeared, and no meeting was consequently held.

At 12 o'clock, the meeting convened by the board of directors, at Swansea, took place at the Dock Office, Quay Parade. There were present—Capt. E. Morgan, R.A., chairman; Messrs. L. L. Dillwyn, G. B. Morris, M. J. Michael, D. Francis, R. Eaton, W. Edmond directors; Mr. G. G. Francis, secretary: Mr. John C. Richardson, treasurer; Mr. J. T. Jenkins, solicitor; Dr. T. Williams, Messrs. H. H. Vivian, M. Moggridge, J. W. Leach, Maxwell, J. Davies, C. Hutchison, J. Oakshot, P. Rogers, Wigglesworth, G. Huxham, J. Jones, W. H. Francis, J. R. Tripp, J. M. Ellery, T. Williams, J. Jenkins, M.A., J. James, E. James, H. T. Arnold, D. Griffiths, I. Jacob, B. Hill, Hennessey, H. K. Eaton, &c., shareholders. The proceedings were commenced by the SECRETARY reading the advertisement convening the meeting, when the seal of the company was then attached to the new register of shareholders. He (the secretary) also produced several proxies, which he had received from absent shareholders, resident in London and elsewhere.

On the motion of Mr. L. L. DILLWYN, duly seconded, the meeting was then adjourned to the Town-hall. After Capt. Morgan had taken the chair, the SECRETARY read the following report of the board of directors:—

"Agreeably with the requirements of your Act of Incorporation, the second ordinary general meeting of the Swansea Dock Company has been summoned this day, by advertisement in the two local and one London newspaper, and though your directors regret they are not able to report that progress which the importance of the scheme demands, and they sincerely desired, they are, nevertheless, gratified at having an opportunity of laying a statement of the position of the company before the proprietors on this occasion, that with their counsel and co-operation, the necessary steps may be adopted for putting the affairs of the company in train for active operation—that the obstructions, so pertinaciously raised for private purposes, and the difficulties which have ensued, may be promptly met and overthrown, for the general benefit of the company, and the advancement of the trade and commerce of Swansea.

The directors elected to act in London, who were dispensed with at your extraordinary general meeting of 21st of October last, and who joined the company professedly on the ground of its great public utility, its advantage to the Loughor Railway, and for the express object of obtaining addit o nal shareholders, so as to produce a more rapid execution of the works, have proved an incubus to the concern, hampering the company and your directors in every possible way, entailing expenses, and creating delays of the most vexatious character.

Your directors ever have been, and still are, fully alive to the very great importance and necessity for docks in this port, and have reason to believe that no difference now exists in the minds of the inhabitants of the town and neighbourhood as to this desideratum. If, therefore, on mature consideration, the proprietors think it prudent to revest the powers in the present directory, they may rest assured that no energy shall be wanting, and no efforts remain untried, in giving full effect to their wishes; and though an unenviable task, though the annoyances and difficulties which they have already encountered and overcome can be known but to the few, they are again ready to undertake the arduous duties and necessary responsibilities of the office, if supported by the voice and approbation of those for whose satisfaction they labour.

It would but detain the meeting unnecessarily to enter upon the promises made to your directors in the early stage of the company's proceedings, which have not been fulfilled by the gentlemen who act under the direction of Mr. Elderton (late one of the joint solicitors of the company), nor is it necessary again to show how desirous most of those parties were, to make the docks a convenience for taxing it with fees to directors and officers in London, for this has been inquired into and explained at former meetings, having been specially disapproved of, and reported upon, by a committee appointed by your own body. Your directors propose, therefore, confining themselves chiefly to the circumstances which have occurred since the extraordinary general meeting held at Swansea, on the 21st of October last.

It is, doubtless, within the recollection of this meeting, that Col. Cameron declared, in December, that two boards of directors were quite unnecessary; and that he pressed forward a resolution, the result of which decided that the management of the Swansea Docks should be at Swansea. At the same meeting that gentleman agreed to meet a committee of shareholders (of which Mr. H. Vivian was chairman), to see whether terms could not be concluded; but though they met, and discussed, and corresponded, no arrangement could be effected; indeed, their efforts signally failed, as you will find by the minutes and report of the committee, which will shortly be read to you; it will, therefore, rest with this meeting as to the course to be adopted in reference to this subject.

The liabilities of the company are, on the whole, not greater than was to be anticipated, when it is recollected that two sessions of Parliament were trenched upon; that two sets of plans were adopted; that a most violent local and Parliamentary opposition had to be met with; that changes in your Bill were forced upon you by the Government, in consequence of the introduction of Model or Consolidated Acts into all Dock Acts passed in the last session; and that yours was one of the first schemes which was saddled with the expense of a local examination. When to this is added the extra charges entailed by offices and officers in London, your directors believe you will agree with them, that a sum amounting to about 7000*l.* is not an unusually heavy amount for such varied and expensive details, and when compared with the cost of other Acts of a similar nature. Your directors cannot, however, refrain remarking, that these charges would not have been so great, but for the existence of two sets of directors.

There is to your credit the sum of 2666*l.* deposited in the Commercial Bank of London in the joint names of Messrs. Evan Morgan, Lewis Llewellyn Dillwyn, and Edmund Nash Norcot, so placed, because at that time no treasurer had been appointed for the company. Though your directors have been most anxious to use this money for the liquidation of some of the more pressing accounts, they have failed to induce Capt. Norcot to sign any cheques, so that not only does this sum lie unproductive, but your directors are constantly receiving most urgent applications from the creditors, and in some instances legal proceedings have been actually commenced against the company. It is, moreover, worthy of note, that although Capt. Norcot was himself a party to an order for the payment of the out-of-pocket expenses of your chairman and secretary, neither of those gentlemen have, as yet, received one farthing of the money of this company. This state of things must be remedied, and your directors intend to make an immediate call on the shareholders, and to take such steps as counsel shall advise for obtaining the money now retained by the Commercial Bank of London.

In compliance with the suggestions of several of the shareholders, your directors have caused the case submitted to Sir Frederick Thesiger, and his report thereon, together with another case, setting forth the facts which have since occurred, to be laid before Mr. Rolt, Queen's counsel, an eminent equity barrister, in order to be fortified with an equity, as well as a common law, opinion: and your directors have the satisfaction of stating, that Mr. Rolt entirely concurs with Sir Frederick Thesiger, as to the illegality of the proceedings of the London gentlemen. Owing to the difficulties before alluded to, and the recent and present depression in the monetary world, it would have been imprudent to take active measures, but your directors assure the proprietors that as soon as those differences shall have been adjusted, and the anticipated improvement in commercial matters will justify steps for progress, they will be prepared to purchase the necessary lands, and take energetic measures for carrying out the objects of the company, for which there is a daily increasing and imperative necessity."

Mr. L. L. DILLWYN would take that opportunity of stating, that in consequence of having observed in the *Cambrian* and *Swansea Herald* an advertisement, signed "A. C. Howden," convening a meeting of dock shareholders, to be held at the Castle Hotel, at 10 o'clock that morning, he attended for the purpose of protesting against the proceedings, as being quite illegal. To his surprise he saw neither Mr. Howden, nor any of the individuals on whose behalf he was supposed to act at the meeting. He consequently left, having waited for about an hour and a half. He wished to call the attention of the meeting to the circumstance, as being in his opinion a most extraordinary proceeding.

Mr. MOGGRIDGE complained as having been, in a similar manner, deceived by the advertisement.—Mr. HENRY HUSSEY VIVIAN, as chairman of the committee of shareholders appointed to arrange between the board of directors and those gentlemen who assumed to be directors in London, begged to state that their reason for not proceeding further with the negociation was, because they knew that, by the Companies' Clauses Consolidation Act, whole power reverted to the hands of the shareholders. They, therefore, thought it unnecessary to take any proceedings for gaining a power which they, as shareholders, would obtain by the mere lapse of time.

Mr. H. K. EATON, in moving the first resolution (for which, as well as the other resolutions passed at the meeting, see our advertising columns), remarked that every company, on looking back to its early history, would regret having expended some money which, under certain circumstances, might have been saved. In reference to the present company, he felt convinced that it was not in the power of the directors to have saved any of the money, which they might regret had been expended. He had great pleasure in moving the adoption of the report, which was seconded by Mr. J. DAVIES, and carried.

Mr. J. JENKINS, M.A., begged to ask what was the amount of money in hand, as well as the amount of the liabilities of the company?—The CHAIRMAN said, that the sum deposited in the Commercial Bank in London, was 2866*l.* The precise amount of the liabilities was not known, as the whole of the bills had not been received, while it was hoped others would be considerably reduced.—Mr. TRIPP thought it would be satisfactory to furnish the shareholders with a detailed account of the liabilities.

Mr. JOHN OAKSHOT remarked that Mr. Tripp had anticipated him. He was about observing that a detailed account of the manner in which the moneys of the company had been expended, would be acceptable to the shareholders. He thought parties would much more readily pay their calls if such an account were laid before them.—The CHAIRMAN assured the meeting that this should be done at the earliest possible period.

Mr. TRIPP was of opinion that, although the directors might not be in a position to give the precise amount due, that they might give the nearest approximation they could, as to the state of the company.

After some further conversation, and statements that there was no desire to keep anything from the proprietors, the SECRETARY informed the meeting that of the accounts received he recollected, Mr. Elderton's bill amounting to 1800*l.*; Cameron and Bain's, 2000*l.*; Mr. Page about 1000*l.*; Mr. Struvé, 250*l.*; Mr. Jenkin's bill had not been received, but would be about 700*l.*; Mr. Attwood's had not been received, but they would call it 250*l.*; printing, about 100*l.*; chairman (out-of-pocket expenses), 150*l.*; secretary's ditto, 150*l.*; advertising (perhaps), 100*l.* Various other bills were named, amounting to between 300*l.* and 400*l.* In answer to a question from Mr. Oakshot, it was stated that the secretary's salary and some other expenses were included in the item of 7000*l.*, estimated in the report.—The CHAIRMAN then explained that many of these bills had been but recently received, although repeatedly applied for, while several had not yet been sent in. With respect to Mr. Elderton's, and perhaps other bills, he was convinced that considerable reductions would be effected.

Mr. L. L. DILLWYN, as one of the directors, begged to assure the meeting that no time would be lost in laying before the shareholders a full statement of the accounts.

The CHAIRMAN assured the meeting that not one farthing had been expended which the directors could have avoided; and he could add, that not a single glass of wine or a biscuit, on account of the directors, had been paid for out of the funds of the company.

Mr. OAKSHOT begged he might not be misunderstood. He did not mean to impute any mismanagement to the directors, but he was convinced that the greater the publicity given to the accounts, the more readily the shareholders would pay their calls.—A conversation then ensued, in the course of which Mr. TRIPP said, he hardly expected that the liabilities of the company could be reduced below 7000*l.*, as the bills received amounted to nearly 8000*l.*

Mr. MOGGRIDGE, in moving the next resolution, expressed the great confidence he felt in the board of directors, who had discharged their arduous duties in a most praiseworthy manner. He hoped they would continue to pursue the same energetic line of conduct, and that they would meet with the unanimous support of the shareholders. The resolution having been duly seconded, was unanimously carried.

Mr. RICHARDSON moved and Mr. JAMES seconded the next resolution, which was carried.

Mr. H. K. EATON moved the resolution following, and requested that the clause in the Act of Parliament to which it referred might be read.

Mr. J. T. JENKINS read the 83d clause of 8 Vic., c. 16, describing the power possessed by the present meeting, and which was cited in a leading article on the Dock question which appeared in the last Number of the *Mining Journal*, and also in the *Swansea Herald*.—The resolution was carried.

The next resolution was proposed by Mr. ILTID THOMAS, seconded by Mr. H. K. EATON, and unanimously carried.

Dr. WILLIAMS proposed the fifth resolution, which provided for the re-election of the nine Swansea directors, but who had ceased to be so by the preceding resolution. He could only state, from the experience of the past, and he believed all the shareholders would coincide with him, that a more judicious selection could not possibly be made.—This resolution was likewise carried unanimously.

Mr. W. H. MAXWELL proposed the next resolution, which was seconded by Mr. M. MOGGRIDGE, and carried unanimously.

Mr. H. HUSSEY VIVIAN moved the next resolution, which authorised the directors to take such proceedings as they may be advised, for the purpose of securing the sum of money deposited in the Commercial Bank of London.—A conversation ensued, during which it was stated that, at the time the money was paid out by the Accountant-General, it was vested in the names of Capt. Morgan, Mr. Dillwyn, and Capt. Norcot, then a London director. The latter now refused to sign a cheque for the purpose of taking out the sum of money for the purposes of the company.

Mr. DILLWYN said, that the sum was vested in the names of three individuals, because the bankers declined receiving it in the name of the directors of the company.

A conversation took place in reference to this resolution, arising from an objection made by Mr. Tripp and one or two shareholders, who were of opinion that the object sought to be gained by passing the resolution had better be left to the discretion of the directors, rather than that a proposition should emanate from the proprietors.—The resolution, having been seconded by Mr. J. C. RICHARDSON, was eventually carried *nem. con.*

A formal resolution, providing for the rescinding of certain bye-laws, having been carried, on the motion of Mr. J. W. LEACH, seconded by Mr. J. R. TRIPP, Mr. J. OAKSHOT proposed the next resolution—a vote of thanks to the directors and the committee of shareholders; and he felt the more pleasure in doing so, in consequence of some observations he had made in the course of the meeting. He could, at the same time, assure the meeting that they had not arisen from any want of confidence in the directors, and he was convinced that the affairs of the company could not be left in better hands. (Hear, and cheers.)—The proposition, having been briefly seconded by Mr. JENKINS, M.A., was unanimously carried.—The remaining resolutions, which were of a mere formal character, having been passed, the meeting separated.—*Swansea Herald.*

THE LONDON AND COUNTY JOINT-STOCK BANK.

The annual meeting of this company was held at the London Tavern Bishopsgate-street, on Thursday, February 3.

J. GRIFFITH FRITH, Esq., in the chair.

Mr. R. P. NICHOLS (the secretary) read the report, for which see advertisement. From the balance-sheet it appeared, that the net profit for the half-year, after payment of 9781*l.* 15s. for interest to customers, was 6882*l.* 11s. 3d. The assets and liabilities formed a total on both sides of 1,457,354*l.* 7s.

The CHAIRMAN moved the adoption of the report—which was seconded by Mr. WHEELTON.

Mr. HAMBLETON raised some objection to the multiplicity of branches, and thought their number would rather more prejudice than benefit the concern.

Mr. COOPER (a director) thought a judicious selection of branches the best means of promoting the welfare of the bank. Their local advantages were very great; for instance, in the late trouble, the company had obtained much credit throughout Kent in making advances—for the hop duty in particular.

A SHAREHOLDER thought the item of preliminary expenses extremely large; it would be enough to pay a year and a half's dividend to the shareholders.—Mr. COOPER begged to differ with the hon. gentleman; for he thought it extremely low, compared with other banks; and, when they considered they had purchased the good-will of their private banks, the amount, in his opinion, was exceedingly moderate.

The report was then adopted unanimously.

The CHAIRMAN then moved that the dividend, at the rate of 6 per cent. per annum, be agreed to.—Mr. JOHNSON seconded the motion, which was agreed to unanimously.—The balance of profit and loss account was carried to the guarantee fund.—William Cory, J. W. Deacon, and Clement Tabor, Esqs., were re-elected directors.—Mr. A. J. VALPY was elected as an additional auditor to the other two, who were re-elected.

Dr. BLOOMFIELD then moved a vote of thanks to the directors, and also to Mr. Luard, the general manager, and to the inspector, secretary, branch managers, and accountant of the Bank, for their zeal and ability in the discharge of their duties.—Mr. WHEELTON seconded the motion, which was passed and carried with acclamation.

Mr. LUARD returned thanks for himself and his colleagues, and expressed himself much gratified at this renewed mark of the approbation of the shareholders. He could bear testimony to the zeal and diligence exhibited by his colleagues, and, indeed, of every clerk in the establishment, which was proved by his late inspection of the condition of the branches, and their management. It must be admitted, that during the last six months there had been an additional call for their attention, as well as diligence, from the turmoil which had pervaded the commerce of the country, and banking operations in general; but, by their aid, and kind assistance of the board of directors, their duties had become comparatively light, and had, as was seen, tended to a good result for the shareholders; for he might say, this bank had, by the prudence and judgment of the directors, quite escaped these calamities, by which other banks had been overtaken. He could say, in reply to the gentleman who objected to the number of their branches, that although they were numerous, they were most completely under the control of the parent establishment.

RAILWAY CALLS.—The amount called up on the English lines for Feb., is 1,554,058*l.*; on Foreign, 132,000*l.*=1,686,058*l.*—showing an increase of 161,032*l.* upon the corresponding month of last year, when the total was 1,393,026*l.*

THE GREAT TUBULAR RAILWAY BRIDGE FOR THE CONWAY.—An important experiment of the great iron tube for the Chester and Holyhead Railway Bridge over the Conway, took place, in the presence of Mr. Stephenson and a large number of engineers, together with a party of directors, on Saturday last. The tube is the first completed, eight of them being required for the bridges to be thrown across the Conway and the Menai Straits. Early in the week the wedges supporting the tube upon the platform, upon which it was erected, were removed, leaving it to rest solely upon temporary stone piers, erected under each end, and having a hold of 6 ft. only on each pier, with a clear span over the river of 400 ft. Thus situate, it was put to the severest test, with a success beyond the expectations of its most sanguine advocates. The experiment was made by running locomotives and heavily-laden ballast waggons through. One of the trains consisted of 28 waggons filled with iron, weighing upwards of 300 tons; and notwithstanding this enormous mass, there was scarcely any perceptible difference in the external outline of the tube, or the least strain in any way. The deflection, while supporting this mass, we are informed, was not more than 3 in. or 4 in.; another account said, that it was as much as 11 in., but it is very doubtful.

SALTASH BRIDGE FOR THE CORNWALL RAILWAY.—Those who take an interest in our western railway communications will be glad to hear that considerable preparations have been made for this stupendous undertaking. We would premise, before we detail the particulars which we are about to communicate, that the estuary of the Hamoaze, at Saltash Passage, is, at high water, about three-quarters of a mile wide, 10 fms., more or less, deep, and, from its narrowness compared to other parts, the stream runs there with a most powerful force. It is designed to carry over the river, at this passage, a bridge of three arches, 95 ft. above the surface of high water—spring tides. To aid in the accomplishment of this great object, the Cornwall Railway Company have purchased two 14-gun packet brigs—the *Pigeon* and *Magnet*—of 300 tons each, and have moored them at the passage about midway. By a series of moorings, it has been ascertained that the bed of the river is covered with mud to depths varying from 18 in. to 15 ft. On the Cornwall side, a stage being moored 20 ft. from the beach at low water, and a 30 bar ladder, with weights attached, let down to rest on the ledge of a steep rock, a diver had yet to descend 9 ft. before the bottom was obtained. On the Devonshire side, there is not so much declivity. The company have just received from Bristol, by Bristol and Exeter and South Devon Railway, to Totnes, and thence by sea, an immense cylinder, weighing 23 tons, 85 ft. 9 in. long, and 6 ft. 3 in. diameter. It is designed to let this cylinder down perpendicularly between the two brigs, when it will be about 25 ft. out of the water, and in that position to moor it with hemp cables, fastened to four or five anchors, some of which weigh 1 ton each, purchased expressly from her Majesty's dockyard. An effort will then be made to pump the cylinder dry, by steam-engines to be fixed on board the brigs. Should the experiment with this cylinder prove successful, it will have to give place to one of much greater magnitude, weighing 130 tons, of the same length, but having a diameter of 30 ft.—thus providing an area of sufficient extent to lay foundations for the piers of this formidable work. At the present season there are not more than about 30 men employed at Saltash; but a far greater number will be engaged in March. They are under the control of the resident engineer, Capt. Donce, who is aided by Mr. Pope, the gentleman who so ably assisted in floating the *Great Britain* steam-packet.—*Western Luminary.*

HIGH LEVEL RAILWAY BRIDGE.—An engraving of this bridge, now in course of erection at Newcastle-on-Tyne, has been published. In noticing it the *Scotsman* says:—Most of our readers are aware that the bridge is, so to speak, a double bridge—that is, two roadways, one above the other, rest upon the same parapets. The lower of these is a common roadway for general traffic; and while there pedestrians and other ordinary vehicles pursue their comparatively quiet way, overhead will be heard the ever-renewed thunder of the railway train. From the engraving, a very clear idea may be formed of the appearance that the bridge will present when completed. The massy pillars upon which the iron arches rest are seen towering above the present bridge, the strong iron-work resting upon them like a gigantic elongated cage, from the great proportions of which the passing train shrinks, by contrast, into something very like insignificance, whilst carts and carriages dwindle into scarcely discernible specks. In the key to this clear, picturesque, and well executed engraving, some of the measurements, &c., of this extraordinary erection are given, and they assist materially in enabling us to form an estimate of its magnitude. The "length of the triumphal arches" is 1375 feet, the span of the arches is 124 feet, and the height from the bed of the river to the parapet is 136 feet. The weight of cast-iron in one arch is 532½ tons, and of wrought iron 50 tons. The total weight of cast-iron in the arches is 4490 tons, and of wrought iron 308 tons. The cost of the mason work of the bridge is estimated at 97,000*l.*, of the viaduct on the Newcastle side (of river) 86,000*l.*, on the Gateshead side 9500*l.*, of the iron-work 112,000*l.*—total of mason and iron work, 304,500*l.*

ABERDEEN RAILWAY.—The southern portion of this line, between Montrose and Brechin, was opened on Thursday.

OPENING OF THE CALEDONIAN RAILWAY.—The directors have resolved that the line should be opened to the public on Tuesday, the 15th February, and that the fares for passengers between Edinburgh and Glasgow should be at the rate of 6s. for 1st class, 4s. 6d. for 2d class, and 3s. for 3d class. The rates on the Edinburgh and Glasgow line are respectively 8s., 6s., and 3s. 10d.

EXTENSION OF THE SOUTH-WESTERN RAILWAY FROM SALISBURY TO EXETER.—On Tuesday last, agreeably with public notice, a meeting was convened of the inhabitants of Shaftesbury and the surrounding district, "for the purpose of taking into consideration the propriety of petitioning Parliament in favour of the bills for making railways from Salisbury to Yeovil, and from Yeovil to Exeter, in connection with the London and South-Western line, and for adopting such other measures in support of the same as may be considered advisable." The area in front of the Grosvenor Arms Hotel, at which the meeting was held, was entirely filled with every description of carriage, which had brought to the place of meeting deputations from various districts in Wilts, Somerset, and Dorset. Mr. Chaplin, M.P., chairman of the company, Mr. Ker Seymour, M.P., a director, and several other gentlemen, pointed out the advantages of the proposed line, and resolutions in support of it were adopted by the meeting.

VALE OF NEATH RAILWAY.—The tunnel on the Vale of Neath Railway between Aberdare and Neath, and which is estimated to be the most expensive undertaking on the whole line, was to have been let on the 13th inst. We heard that several contractors, men of great skill and large capital, had sent in estimates. It was to be divided into four separate takings; and this plan has, from its magnitude, been considered a very judicious one. By it the various sections can be worked at the same time, and its completion, which might have been delayed a long time, is now rendered an almost certain matter. With the present lack of employment, it will prove highly beneficial to this neighbourhood, as it will give employment to a great many sinkers and excavators.—*Cambrian.*

The Trieste and Vienna Railway is expected to be opened throughout in 1849, with the exception of the Semmering Mountain, which lays between Mürzuschlg and Glognitz; this barrier, however, the Austrian Government has determined shall be constructed on the atmospheric system, but it is the intention to wait until the most approved system has been ascertained in England. It will be recollected, that in the *Mining Journal* of June 5th last, we inserted a letter from our correspondent, Mr. G. Shepherd, C.E., directing attention to the great advantages the atmospheric system possessed for working by water-power, on the Austrian lines. One of the advantages anticipated in Vienna is, that English coal, on the completion of the railway, can be delivered at Vienna, from the shipping at Trieste, at 2*l.* per ton. The price of Horowitz coal per cwt. is 2s. 6d.; firewood, per cubic fathom, 2*l.*; the expense of fuel in Vienna is very heavy.

COST OF WORKING THE BELGIAN AND FRENCH RAILWAYS.—From a speech delivered by the Minister of Public Works of Belgium, in the Chamber of Representatives, it appears, that the cost of working and keeping up the Belgian railways, is much less than that of the French. The Minister made the comparison between the state railways of Belgium and the Northern of France, although the latter having only been opened a short time, has not yet had to renew its rails, &c. The Belgian Government works 9 lines, the Northern Railway Company 2, the Orleans 2, Rouen and the Rhenish only 1 each. The Belgian railways have 11 stations at the extremities of lines; the Northern Railway 3, Orleans 3, Rouen and the Rhenish Railway 2. The Belgian railways have 29 principal stations, the Northern Railway 8, Orleans 5, Rouen 3, and the Rhenish line 2. The Belgian railways have 66 intermediary stations, the Northern 34, Orleans 13, Rouen 17, Rhenish 8. In Belgium for a movement of 3,700,000 passengers, and 791,000 tons of merchandise, there has been an expense of 7,245,000 fr. On the Orleans Railway, the expense was 3,411,000 fr. for 4,521,000 passengers, and 237,000 tons of merchandise. On the Rouen Railway, the expense was 3,594,000 fr. for 4,004,000 passengers and 265,000 tons of merchandise.

At the inquest held last week, on the guard killed on the South-Western line, Mr. Locke, the engineer, mentioned, as a proof of the perfection to which engine-building was now carried, that he had known an engine run 37,000 miles on the Grand Junction line, without any injury, and from 29,000 to 30,000 miles further, after a mere tightening of the parts of her machinery.

Original Correspondence.

THE HYDRAULIC TELEGRAPH.

SIR,—Several years ago, I witnessed the principles of the hydraulic telegraph at work in Edinburgh, exhibited along with a working model of the "centrifugal railway;" and, prior to this period, had seen it in the "Adelaide Gallery of Practical Science." It is a mistake to say, that water is an "inelastic fluid." The experiments of Mr. Perkins most unequivocally proved its compressibility—*ergo, elasticity*; and I remember to have seen M. Gay Lussac, in the "Collège de France," make an experiment equally conclusive. Several liquids, *water* among others, were hermetically sealed in glass tubes, which were *graduated*; on breaking the tips of these tubes, the liquids severally were depressed by the column of atmospheric air, and the degree of compression determined by the scale. Changes of temperature would materially affect such a mode of communication—water, for instance, begins to *expand* minus 39° Fahr., &c. The water tube would require to be encased in a non-conducting material, or imbedded in a similar substance. I confess I should have more reliance on a telegraph formed of an *air-tight* tube, and worked by *pistons* at each terminus.

Portland-place, Hull, Feb. 1. —— J. MURRAY.

THE LATE MISS MARY ANNING.

SIR,—I remember that the late Miss Anning, of whom I have already tendered a brief and passing notice, showed me, with great glee (I believe I had seen it before), the caricature which Sir Henry De la Beche had, in his humour, and for private distribution among his friends, sketched and etched, in ridicule of Mr. Charles Lyell's peculiar geological opinions. This caricature represented an *ichthyosaurus*, in collegiate costume, lecturing to his fellow-creatures on the organic remains of MAN. In the assembled group are seen various species of *ichthyosauri*, with *plesiosauri* in the background—one with "spectacles on nose," and viewing with intense interest the human scull before the lecturer. A crocodile, or *teleosaurus*, has thrust his head above water, listening to the eloquence of the orator—while two or three of the *ichthyosauri* display a noble array of teeth! "*A Lecture.*" —"You will at once perceive (continued Professor *Ichthyosaurus*) that the scull before us belonged to some of the lower order of animals; the teeth are very insignificant, the power of the jaws trifling, and, altogether, it seems wonderful how the creature could have procured food!" It may, perhaps, be reasonably asked, did this caricature form the *text*, or give the hint, for the still more curious *caricature* of the *Vestiges?*

Portland-place, Hull, Jan. 28. —— J. MURRAY.

THE *VESTIGES.*

SIR,—"Who wrote the *Vestiges?*" is a question more curious than important. Its paternity, I believe, has been disclaimed by every one to whom public opinion has awarded it. It is full of insidious poison—a pitfall for the unwary youth and the superficial reader—because tinselled with the brocade of *ad captandum* language. It is to be hoped, that the author is, however, now ashamed of himself and his heartless production. The axe has been unsparingly applied to the root of this Upas tree, and criticism been triumphant. The article, in the *Edinburgh Review*, by Professor Sedgwick, laid it in ruin. Every sound geologist repudiates it, as in complete antagonism with the stern *facts* of his science, and as at war with its entire phenomena. The mathematician smiles at its puny and puerile conceit. The logician laughs outright at its *petitio principii*, and *reductio ad absurdam*, and pronounces it to be a mere cobweb of flimsy sophistry—while the philosopher wonders that such a superficial tissue of "shreds and patches" should have ever raised a "sensation," as the French have it. So true is it, that the mass of the community may be fairly divided into two grand classes—"*Ceux qui pensent, et ceux qui ne pensent pas*"—and it is to be feared that the latter is the predominant party. Sir Richard Vivian publicly repudiated its authorship; and Dr. Nichol, the eminent professor of astronomy in the Glasgow University, to whom I wrote on the first appearance of the *Vestiges*, unequivocally denied his then having even seen the work referred to. I am quite sure that no geologist, whose opinion is worth anything, is the author of this book; I speak advisedly, and as the inference from direct correspondence. The *Vestiges* has been also assigned to Mr. W. Chambers; but whatever may be his sceptical predilections, and of which I am ignorant, there is internal evidence that the work is certainly not his production. The Countess of Lovelace has also been singled out as the reputed authoress—with what truth, I know not, and am ignorant of her qualifications for the task. Even Lord Brougham has not escaped; but I believe he has at length disowned the charge, though *Mr. Punch* "makes merry," in his pleasantry, with the speculation, and, finally, suspends the "foundling" under a door-knocker, bearing the effigies of his Lordship's face. I doubt Lord Brougham being the author; the *scepticism* which the work reveals, and the *superficial* displays of science sprinkled over its pages, might, so far, warrant such a conclusion, yet the drapery and the dress forbid the assumption. "The voice is the voice of Jacob, but the hands are the hands of Esau."

"Stat nominis umbra."

Portland-place, Hull, Jan. 28. —— J. MURRAY.

THE *VESTIGES.*

SIR,—I have said that this notable work is a *caricature* on geology—for, beyond all doubt, it is a libel on the science. It proceeds on the assumption that the primitive palæozoic rocks contain the mere rudiments of organisation—the *punctum saliens* of existence—and that there have been, in the remote and undefined ages of the past, a series of evolutions from less perfect to more perfect, and more highly finished systems of organism, from the *monas termo* and *atomus* up to man, "nor there stops short"—angelic beings and superangelic beings, in their turn, will succeed to him, and read a lecture on his skull.

Cycles in epicycles, orbs in orbs.

For all this romance there is not a tittle of proof. Is the *trilobite* a type of such simplicity? It is, on the contrary, a complex structure, and its eyes, so to speak, highly elaborated, and adjusted to the refinements of the laws of light and vision. Besides, Mr. Charles Lyell informs me, that he has found in trans-Atlantic formations, MUCH LOWER in the series than the Silurian rocks of this country, fossil forms of VERTEBRATA!—a complete extinguisher to the romance of the *Vestiges*. We should be careful to determine what is meant by the term *perfect*, which is here one of comparison. Each created form is "perfect after his kind," and is as wisely adapted to its habitat, as what we, in our wisdom, deem more elaborate and complicated designs, and as intelligibly foreshadows the Almighty fiat that formed it. Besides, has not the genius of Ehrenberg dissipated the illusions of Fancy which overhung the region of *infusoriæ*. Far from simple, they are *polygastric*, and most curious and elaborate beings. Well might Sir Isaac Newton characterise, as supremely absurd, the creation of new systems out of old. The wearing out, or extinction, of some species, and even genera, may be granted; but as to the introduction of *new* species, the notion is a mere illusion, and no proof whatever can certainly be adduced in its support—still less, periodic creations, or continued creations, according to the versions of Lyell, Phillips, and others. There was a *period of repose*, and there is no reason to think it has been disturbed. It is quite true, *algæ* and *mosses* do make their appearance in some early rocks, but they are the most elaborate of their list—*e. g., Lycopodiums* among the mosses; add to these things the *nebular hypothesis*, the pet of Sir William Herschell, and which seemed to adumbrate the vision of progressing creations, has at length dissolved like the vision of enchantment, and melted into "airy nothing." Touched by the Ithurial spear of Truth, in the revelations of the gigantic telescope of Rosse, the spell is broken, and the fragments of the mirror of Fancy only reflect the *disjecta membra* of the follies of speculation.—J. MURRAY: *Portland-place, Hull, Feb.* 1.

UNIVERSAL DELUGE.

SIR,—To attempt the proof of this *cataclysis*, as having been either universal or intentional on the part of Divine ubiquity, from the *facts* of geology, would be about as rational as the success of the expression of the Orlando Innamorato—"*Abbajar' alla Luna.*" Dr. Murray is mistaken in his idea of my having a *penchant* to tourney with him, as I never, to my knowledge, saw a single line from his pen on this subject. The *facts* of geology attest, undeniably, that TELLUS never was subjected to vicarious nor extraneous violence, either structurally or superficially. All the evidences of mountain throes, and continental emergence and submergence, are those of regular and continually-recurring acts of natural, and, therefore, necessary, violence—violent, because impending and irremeable.

Barnsbury-park, Jan. 31. W. RADLEY, Ch. E.

THE GREAT NORTHERN RAILWAY COMPANY, AND THEIR CALLS IN ARREAR.

SIR,—I am a small holder of shares in this railway, originally purchased by me for investment. I paid the calls as they became due, excepting the one of September 30th, 1847, which, in consequence of the severe pressure then existing, I considered it prudent to defer doing until December 1st last, when I likewise paid the first instalment of the last call—being, at the same time, charged by the bankers 63 days' interest, at the rate of 5 per cent., on the call in arrear. Not having thus allowed the latter to remain further in arrear, and paying the same and interest within the current half-year, I certainly hoped that section 8 of the company's Act, regarding forfeiture of interest, would not be applicable in my case; and, therefore, Sir, judge my disappointment at receiving lately a warrant for interest up to Dec. 31st, 1847, and finding that on each share, which for the half-year amounts to 3s. 4½d., a deduction of 1s. 4½d. is made. It is true, that this proceeding is only in accordance with the powers taken by the Great Northern Railway Company; but mark, Mr. Editor, the injustice!—for, firstly, having charged me, and properly too, with interest on the time my call of 2*l.* per share was in arrear; secondly, I am punished in being deprived of the company's interest on the same; and, thirdly, as if such an infliction was not sufficient, the further wrong of withholding the interest due on the whole amount of calls previously paid is committed. This, Sir, is robbing Peter to pay Paul with a vengeance; and, if adopted in these trying times by all railway companies who are constructing their works, will have a very prejudicial effect on such description of property. Great Northern shares are, from natural causes, sadly depreciated at present; but it is easy to prognosticate that, in case the directors persist in acting thus stringently towards unfortunate shareholders, who, from unforeseen circumstances, cannot pay calls promptly, yet may do so, provided a little breathing time be allowed them, they will be lower still. In fact, there will not be many individuals to hold this stock at any price, who, similar to myself, possessing real property far exceeding in amount all railway liabilities, will be cautious, ere they enter into a concern where temporary misfortune is so harshly treated. Hoping, through your medium, by a short statement of facts, to arouse the attention of the Great Northern directors to the impolicy of their proceedings, I must solicit the insertion of the above in your next Journal.

A CONSTANT READER, AND NO SPECULATOR.

Abergavenny, Jan. 31.

WHEELER'S IMPROVEMENTS IN STEAM VALVES.

SIR,—In your useful Journal of the 22d ult., you give the general outlines of a patent for improvements in steam valves by Mr. E. Wheeler, of Basingstoke, which patentee's several claims have, perhaps, not one feature of novelty from beginning to end, and shows how necessary it is for inventors ever to be conversant with the past history of inventions, and also always to have some general knowledge of what is, from time to time, appearing in the periodicals of the day; and, as these are now neither scarce nor costly, reinventing patentees most certainly have themselves to blame for thus blindly running themselves into needless expenses. The principal claim in Mr. Wheeler's patent appears to be the application of a piston, attached by a connecting-rod to the back of the common slide valve, so as to remove the great proportion of steam pressure on the back of the valve. Now, if he will look to the Glasgow *Engineers' Magazine*, vol. 2, page 137, Mr. Wheeler will there find his identical invention described, with sketches of the same, by a Mr. J. Cumming, as far back as 22d Dec., 1842; and, if he will apply to my ingenious friend, Mr. Wingate, of Messrs. Thomas Wingate and Co., engineers here, he will find that he has been adopting those very valves, for many years past, even to engines of considerable size, and this with success, for pit-engines, which require to be handed. I have at present a set of nozzles all but completed for an engine, of 6-ft. stroke and 30-in. cylinder, where 50 lbs. of steam is to be employed. I send you a sketch*, which I made as a memorandum of one of Wingate's valves, on seeing it in the autumn of 1846. The claim for a sliding plate, added to the back of the slide valve, so as to make it a valve of equilibrium, he may also find described in Bourne's *Treatise on the Steam-Engine*, page 200, and at work on dozens of steamers on the Thames in the beautiful oscillating engines of the Messrs. Penn and Sons, of Greenwich. The claim for a differential safety-valve—he may also find a superior one described in the above magazine, vol. 2, page 435; and its character as bad and not new, in vol. 3, page 42; and, lastly, the claim for the piston-backed valve, applied as a stop valve, may be new in its application; but the "double beat," or Cornish valve, is infinitely superior as a stop valve.—P. M. D.: *Glasgow, Feb.* 1.

* We have received the drawing and description, which bears the date 21st Oct., 1846.

THE SPRAY PUMP AT LLANHILLETH.

SIR,—To answer the very natural inquiry, of "what has become of the spray pump, at Mr. Blewitt's pit, at Llanhilleth," is my reason for addressing you on this occasion? The free discussion of this interesting subject; through the medium of your columns, could not prove otherwise than both useful and instructive to a large class of your scientific readers. In September, last year, the labours of the spray pump were brought to a close at Llanhilleth; and, at the very time Mr. Blewitt's letter appeared in your Journal, announcing the "complete success" (!) of the experiment, and that it was to be seen in "daily operation" (!) at his pit at Llanhilleth. The spray pump was in *statu quo*, and has so remained up to the 19th inst., when it was taken out of the pit, and put aside. The pit is now intended to be carried down in the ordinary manner adopted in South Wales. That I was correct in the opinion given at the conclusion of my letter to "A Rhondda Collier"—viz.: that *I did not believe it practicable to sink the pit in question to the coal, until the spray pump was removed, and the ordinary system of the country introduced*—is now beyond a doubt. In arriving at this conclusion, I was guided by the "*experience, mechanical knowledge*, and *scientific acquirements*" obtained in South Wales, after an active toil of a quarter of a century. It is due to the public, to be apprised, through your columns, that the machine is *no longer to be seen at Llanhilleth*, to prevent a repetition to others, of the disappointment experienced by several gentlemen, who have, to my knowledge, travelled long distances, for the purpose of seeing this wonderful machine, believing in the truth of Mr. Blewitt's letter and Mr. Adcock's advertisement—(the latter, I observe, has been recently modified.) A short time since, a gentleman, well known in the anthracite district, Mr. David Lloyd, of Cwmamman, Llandilo Vawr, Carmarthenshire, made a purpose journey, with the intention of seeing this "froth machine" at work, lifting water *à la tornado*. Mr. Adcock will, however, have another trial afforded him, by the kindness and liberality of Mr. Insole, sen., at his pit, near Pontyprydd, when, if he (Mr. Adcock) succeeds with the present steam-engine, in clearing the pit of water continuously, for the space of three months only, I shall then confess myself a convert to its merits. Rumour has it, that the Victoria Iron Company do not intend applying the spray pump in their deep pit—if so, they are prudent men, in being content with one "important improvement in machinery" at a time.

Newbridge, Jan. 29. JAMES BROWN.

PLANS FOR COMMUNICATING WITH THE PASSENGERS OF A RAILWAY TRAIN.

SIR,—I beg to propose, through your useful Journal, to those interested, a mode of communication with the conductor, engine-driver, guards, and passengers, of a railway train. The conductor ought to be the person to whose judgment the propelling of a train should be left. I would have him placed in front of the whole in a carriage, fitted up expressly for his use: he should sit on an elevated seat, and have before him a day and night telescope, to enable him to command the road and to inspect obstructions, and to discern objects which his eye alone could not determine: he should have placed also before him a set of keys, communicating by wires with the steam-pipe, to open valves that would at once attract the attention of the engine-driver. Those keys would be numbered 1, 2, 3, &c. Suppose No. 1 to be used for slow; 2, stop; 3, reverse motion, &c.; or the words might be written, instead of numbered; this would enable the engine-driver to act quickly and promptly, giving him only his own duty to perform. In case of danger, the alarm would not be heard by the passengers, which I consider a most important feature, as unnecessary or real alarm only creates confusion, and never tends to diminish the actual danger. I need hardly observe, that the situation of conductor ought to be filled by a person possessing much firmness of purpose and determination to act boldly and fearlessly in cases of difficulty, or even certain destruction. I also propose to divide the carriages longitudinally, leaving in the centre a clear space for a waiter's passage; and, instead of dividing the carriages in three divisions, as they are at present, I would merely have a saloon on each side of the passage; the entrance to be from each side of the carriages; and, in the centre, the saloons to be divided in single seats, whether in first, second, or third-class carriages, with a table to sit and write or read at; the doors of the saloons, opening into the waiter's passage, would be shut by him, and, when wanted by the passengers, a small sliding pannel in the door, pushed a few inches from either side, would leave a small pane of glass exposed to the waiter's passage, with simply the word *waiter* painted on it. This glass pane would throw a light in the passage, and immediately attract the attention of the attendant, who would open the door and see what was wanted. I would connect the carriages throughout by bridges, with rails, to protect the waiters in passing from one end of a train to the other. The bridge, when not in use, could be drawn into the carriage, or appear like a door; by this means you can, in a very short time, communicate either with passengers, engine-driver, or conductor. There might be a travelling hotel to supply refreshments, which I think would be highly prized by persons who travel much by railways, particularly ladies and persons in delicate health. Many other little conveniences might be added, which would ultimately be profitable to the company, by inducing many to travel, whose delicate health makes them afraid of the journey. The third-class carriages ought also to be made comfortable—a poor man's health is his fortune, and it ought to be cared for; his time also is his money; and better and more fitting times of starting third-class trains ought to be adopted. In conclusion, I shall be happy if these suggestions will effect any good; they are simple and original, and have been submitted, many months ago, to several connected with railways, and whose advice I have taken in sending them to your columns. JAMES TODD, Engineering Surveyor.

Abergavenny, Jan. 29.

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Asiatic—14, Grafton-street	2	P.M.
MONDAY	Entomological—17, Old Bond-street	8	P.M.
	British Architects—16, Grosvenor-street	8	P.M.
	Chemical—Society of Arts, Adelphi	8	P.M.
	Medical—Bolt-court, Fleet-street	8	P.M.
	Pathological—21, Regent-street, Waterloo-place	8	P.M.
TUESDAY	Medical and Chirurgical—53, Berners-street	8½	P.M.
	Civil Engineers—25, Great George-street	8	P.M.
	Zoological—11, Hanover-square	9	P.M.
	Syro-Egyptian—71, Mortimer-street, Cavendish-square	7½	P.M.
WEDNESDAY	Graphic—Thatched-house Tavern	8	P.M.
	Society of Arts—Adelphi	8	P.M.
	Pharmaceutical—17, Bloomsbury-square	9	P.M.
	Ethnological—17, Saville-row	8	P.M.
	Literary Fund—73, Great Russell-street	3	P.M.
THURSDAY	Royal—Somerset-house	8½	P.M.
	Antiquaries—Somerset-house	8	P.M.
	Royal Society of Literature—4, St. Martin's-place	4	P.M.
	Medico-Botanical—32, Sackville-street	8	P.M.
FRIDAY	Astronomical—Somerset-house	8	P.M.
	Royal Institution—Albemarle-street	8½	P.M.
	Philological—12, St. James's-square	8	P.M.
SATURDAY	Westminster Medical—17, Saville-row	8	P.M.
	Royal Botanic—Inner Circle, Regent's-park	3½	P.M.

GEOLOGICAL SOCIETY.

JAN. 19.—Sir H. T. DE LA BECHE (President) in the chair.

A paper "On the Agate Quarries of Oberstein," by W. J. Hamilton, Esq., secretary of the Geological Society, was read. The village of Oberstein is situated in the valley of the Nahe, on the road from Bingen to Saarbruck, and about 30 miles from Kreuznach. In the valley is seen the coarse red conglomerate, which forms the basis of the sedimentary formations of the district, but near the village overlies and laps round protruding masses of amygdaloidal trap and porphyry. Below Kirn, it is covered by sandstones and blue shales, which, often broken through by trap rocks, extend into the great basin of Mayence; and are there covered by the tertiary formations in which organic remains are so abundant. Near Oberstein, the conglomerate contains veins of imperfect agate or chalcedony, of a honey yellow or reddish colour, and by means of certain processes, is made to assume the deep red of the carnelian. These, however, are not the real quarries of the celebrated Oberstein agates, which come from the hills near Idal, about two miles distant. The intervening country consists of a reddish brown trap, forming lofty cliffs, and containing numerous vesicular cavities, filled with zeolites, calc spar, and other mineral substances. Beyond Idal, is a greenish-brown trap rock; some portions of which are softer than the others, and contain nodules from 1 in. to 1 ft. in length, which are filled with chalcedony, or agate. In an escarpment of this rock are the real agate quarries. The smaller agates are solid, being completely filled with a compact pale ash grey chalcedonic mass. The larger ones are invariably hollow; the outer circumference consisting of layers of the same pale grey chalcedony, lined with botryoidal mamellations, or imperfect quartz crystals. The large nodules are found compressed, flattened out, and elongated, marking a peculiar action during the time of their formation. It is the outer portion of the agate which is used for ornamental purposes; and the workmen have learnt to change their colour, some becoming dark brown, or chocolate, others zoned with alternate layers of black and white, or brown and white, like the onyx, or sardonyx, of antiquity—not a few of which seem to have been produced in the same way.

INSTITUTION OF CIVIL ENGINEERS.

JOSHUA FIELD, Esq. (President), in the chair.

The meeting was numerously attended, and, in taking the chair for the first time since his election, the president addressed the members at considerable length, dwelling chiefly on the intimate connection between the civil and the mechanical engineers, their dependence upon each other, and the importance of maintaining that union between the two branches of the profession, that had ever been one of the main objects of the institution. He showed, that originally engineering was confined to the constructive or mechanical branches; raising heavy weights, building mills, draining mines, and all the primitive wants of mankind; by degrees, as civilisation extended, the exigencies of the world became greater, luxuries were required, that could only be supplied by greater exercise of talent and skill; manufactories were multiplied, manual labour could no longer suffice, the steam-engine was generally employed, and the consequence of this increase of production was, that the roads required to be amended, rivers and canals to be cut, for carrying this abundance of merchandise and passengers, whilst docks and harbours required extending, for the reception of the shipping for the increasing export trade. These wants called into being another class of men, who, with great mechanical skill, combined more than ordinary theoretical knowledge and business habits, to enable them to combine and use the powers of all other classes. These men were termed civil engineers, in contradistinction to military engineers, whose education and experience fitted them solely for the art of war; and by these men, Great Britain had been placed first in the list of the civilizers of mankind.

MR. FIELD, as the first president elected from among the mechanical engineers, dilated, at length, upon the immense strides made within the last century in the production of the mechanic arts and in public works, under the combined efforts of the two classes alluded to. He then entered more minutely upon the subject of steam navigation, to which he had principally devoted his personal attention, and gave most interesting details of the subject, ending by apologising for occupying so much of the time of the meeting by saying, that he must be permitted to feel more than ordinary pride in being elected the president, when he looked around him, and saw that the association of six young engineers, who, in 1818, met occasionally, to chat over mechanical subjects, had extended, in the course of twenty-nine years, into a society consisting of upwards of 600 members, and comprising within it almost all the engineers of eminence in Great Britain. The address was vehemently applauded, and the president was requested to allow it to be printed in the minutes of proceedings.

The discussion was then renewed upon Mr. Ransom's paper, "On the Manufacture of Artificial Stone." The Rev. Dean of Westminster, Sir Henry De la Beche, Mr. John Phillips, Dr. Garrod, Mr. Barry, and other visitors taking part in it with the principal members of the institution. The remarks turned chiefly upon the chemical and physical properties of the material, and the cost of its production in the moulded form as compared to that of carved stone. In its chemical properties it was shown to be at least equal in purity to the production of Nature; for, on the statements of the eminent chemists who had subjected it to severe tests, it was proved to be totally insoluble in boiling water, however long immersed, and also to be capable of resisting the action of mineral acids. In this respect it differed from glass, which always yielded a portion of its alkali to the action of water. It was further stated, that it had perfectly resisted the action of frost, vases filled with water having been repeatedly frozen without their sustaining any injury; the opinion of the meeting appeared to be unanimous as to the useful chemical properties of the artificial stone. Satisfactory statements were adduced as to its strength and other physical properties, and some very interesting remarks were made on the subject, comparing the substance produced artificially with certain sandstones found in this country, which, by the action of compression and heat, had attained a degree of hardness equal to quartz. The experiments of Hall and Watt on the production of artificial stones were also alluded to as bearing upon the question. Experiments made on the strength of the artificial stone proved it to be superior to those natural stones with which it had been tested—viz.: Caen, Bath, York, or Portland stone. Numerous specimens were exhibited to the meeting, showing its universal applicability to constructive and decorative purposes; fractured pieces were shown of every variety of texture, from the porous sandstone to the most compact granite. The price of the material was stated to be such as to render it available for all useful and ornamental purposes.

The monthly ballot then took place, when the following gentlemen were duly elected:—M. Scott, P. M. Crane, T. Cundy, G. Harrison, and C. H. Wild, as associates.

The paper announced to be read at the meeting of Tuesday, Feb. 8, was, "On the Drainage and Sewerage of Bristol," by James Green, Member Inst. C.E.

A letter of the 10th from Christiana (Norway), states that Mr. England, the engineer, who was sent to Norway by Mr. Stephenson, has finished the plans for the intended railroad between Christiana and Lake Miosen, the length of which will not be more than about 87 miles—the expense is estimated at 10,112,400 frs. It will bring Christiana, the greatest port, and the centre of the most important part of the trade of Norway, in communication with Lille-Hammer, about 19 Swedish miles from Christiana, at the northern extremity of Lake Miosen, situated in regions extremely difficult of access, but very rich in forests. The traffic upon this line of heavy goods, building, and other timber and wood, will be immense.—*Galignani.*

A VERY BAD LIVER AND STOMACH COMPLAINT CURED BY HOLLOWAY'S PILLS.—Mr. Robert Wardle, residing at Ravensworth, near Richmond, had been a very severe sufferer for years, from a most obstinate liver and stomach complaint. He tried a number of medical men, but their medicines afforded him no relief: he then had recourse to Holloway's pills—which invaluable remedy soon restored him to excellent health.—These pills act so immediately in the seat of the disease, that they are considered the most popular specific for bile, sick headaches, deranged stomachs, disordered liver, flatulency, and similar complaints; and, as a family medicine, Holloway's pills cannot be excelled—Sold by all druggists; and at Professor Holloway's establishment, 244, Strand, London

THE PATENT SAFETY FUSE;

FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the SAFEST, CHEAPEST, and most EXPEDITIOUS MODE of effecting this very hazardous operation. From many testimonies to its usefulness with which the manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c.:—"I am very glad to hear that my recommendations have been of any service to you; they have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall. 42

ADCOCK'S PATENT SPRAY PUMP.—This important

INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION, the PATENTEE is ready to RECEIVE, and to execute, ORDERS.—Apply to Henry Adcock, C.E., at his offices, No. 3, Northumerland-street, Strand, London, where pamphlets, descriptive of the invention, may be had; at the office of the *Mining Journal*, 26, Fleet-street; and through any respectable bookseller—price 6d. 43

PATENT GALVANISED IRON AND WIRE ROPE WORKS,

MILLWALL, POPLAR.

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging. 44

PATENT METALLIC LAVA—FOR FOOT PAVEMENT,

FLOORING, COVERING OF ARCHES, TERRACES, VIADUCTS, TUNNELS FOR RAILWAYS, &c.

MANUFACTURED ONLY BY ORSI AND ARMANI.

OFFICES—6, *GUILDHALL-CHAMBERS, BASINGHALL-STREET.*

WORKS—*(CUBITT'S WHARF) MILLWALL, POPLAR.* 45

CAMERON'S COALBROOK STEAM COAL & SWANSEA

AND LOUGHOR RAILWAY COMPANY.

[REGISTERED AND INCORPORATED.]

OFFICES—No. 2, MOORGATE-STREET, LONDON. 46

Notice is hereby given, that the DIVIDEND, at the rate of 8 per cent. per annum, for the half-year ending Dec. 31, 1847, will be PAYABLE at the company's offices here, on and after the 22d inst. By order of the board,

February 4, 1848. A. C. HOWDEN, Secretary.

N.B.—For convenience, the days of payment are, Monday, Tuesday, and Thursday, in each week, between the hours of Eleven and Three o'clock.

SWANSEA DOCK COMPANY—SECOND ORDINARY MEETING—JANUARY 31, 1848.

The Half-yearly Second Ordinary General Meeting of the proprietors of this company was held at the Dock Office, Quay Parade, Swansea, at Twelve o'clock at noon, on Monday, the 31st of January, 1848, pursuant to public notice, and thence adjourned, for convenience, to the Town Hall of the said town. 47

PRESENT:

Capt. EVAN MORGAN, R.A. (chairman of the company), in the chair,

Messrs. L. L. Dillwyn	Messrs. T. Williams, M.D.	Messrs. W. M. Maxwell
David Francis	David Griffiths	H. K. Eaton
H. Hussey Vivian	J. Jenkins, M.A.	Isaac Jacob
M. John Michael	Geo. Huxham	Geo. Grant Francis
Geo. Byng Morris	M. Moggridge	John Wm. Leach
Wm. Edmond	John Jones	Eli James
H. Wigglesworth	H. T. Arnold	John Oakshot
John Trev. Jenkin	Robert Eaton	J. C. Richardson
James James	John Davies	J. M. Ellery
John R. Tripp	Thos. Williams	W. H. Francis
C. Hutchison	H. B. Hennessey	Benjamin Hill
H. W. Jones	Philip Rogers, jun.	&c. &c.

The Secretary stated, that he had received proxies from—

L. W. Dillwyn, Esq., Swansea — Mrs. Mary Eaton, Swansea

Geo. Nicholls, Esq., London — Albert Jenkin, Esq., London

Mr. F. B. Sanguinetti, London.

The advertisement convening the meeting having been read from the *Cambrian* paper of the 14th January inst., the Secretary produced the new register of shareholders, which having been duly sealed by the chairman with the common seal of the company, it was

Moved by Mr. L. L. Dillwyn; seconded by Mr. M. John Michael, and resolved,—

That, for the convenience of the proprietors, this meeting do adjourn to the Town Hall.

Where the chairman, having taken his seat, requested the secretary to read the report of the directors, and also the proceedings of the shareholders' committee, and Mr. Howden's letter—which having been done, the following resolutions were unanimously carried:

Moved by Mr. H. K. Eaton; seconded by Mr. J. Davies,—

That the report of the directors, now read, be approved, adopted, and confirmed, and that the same be entered in the minute-book of this company.

Moved by Mr. M. Moggridge; seconded by Mr. L. L. Dillwyn,—

That the chairman (Capt. Evan Morgan) be continued chairman of this meeting, until its termination, notwithstanding any resolution which may be passed thereat, whereby he may cease to be a director of this company.

Moved by Mr. J. C. Richardson; seconded by Mr. James James,—

That the directors appointed by the 14th section of the Swansea Dock Act, 1847, or so many and such of them as are now the directors of this company, and all other persons who are, or assume to be, directors of this company, be now discontinued as such directors; and that they, and each and every of them, do cease to be or to act as directors of this company, immediately on the passing of this resolution.

Moved by Mr. Ittid Thomas; seconded by Mr. H. K. Eaton,—

It is considered that the number of directors was, at the Extraordinary General Meeting of this company, held on the 21st day of October last, legally reduced to nine; but, in order to provide for the possibility of such reduction not having been then duly effected—It is resolved, That the number of directors to be henceforth nine, and that they be accordingly now reduced to that number, and that the quorum of a meeting of directors be three. Moved by Dr. Williams; seconded by Mr. Eli James,—

That Messieurs Evan Morgan, Lewis Llewellyn Dillwyn, George Byng Morris, Michael John Michael, William Edmond, David Francis, William Walters, Robert Eaton, and Calvert Richard Jones, be now appointed the sole directors of this company for the ensuing year, and that such appointment do now take effect.

Moved by Mr. W. M. Maxwell; seconded by Mr. M. Moggridge,—

That the order of rotation in which the directors appointed by the last resolution shall go out of office, shall be as prescribed by the 88th section of the "Companies Clauses Consolidation Act, 1845."

Moved by Mr. H. H. Vivian; seconded by Mr. John Crow Richardson,—

That the directors do adopt such measures, either by proceedings at law or in equity, or otherwise, and either in the name or names of this company, or of any other person, for enforcing payment of the sum of £2866, belonging to this company, and deposited at the Commercial Bank of London, in the names of Messieurs Evan Morgan, Lewis Llewellyn Dillwyn, and Edmund Nash Norcot, as they may consider most expedient, or as have been, or may be, advised by counsel.

Moved by Mr. J. W. Leach; seconded by Mr. J. R. Trip,—

That inasmuch as it will be unnecessary that the proceedings of the directors, this day appointed, should be subject to the bye-laws, passed on the 19th of August last, it is expedient to rescind the same, and such bye-laws are accordingly hereby rescinded and repealed. Moved by Mr. J. Oakshot; seconded by Mr. J. Jenkins, M.A.,—

That the best thanks of the proprietors be presented to the directors for their valuable services during the past year, and also to the committee of shareholders, appointed on the second of December last.

Moved by Mr. L. L. Dillwyn; seconded by Mr. Ittid Thomas,—

That the resolutions of this meeting be advertised once in the *Mining Journal, Cambrian*, and *Swansea Herald* newspapers. (Signed) EVAN MORGAN, Chairman.

The chairman having thanked the proprietors for the attendance, and retired from the chair, it was

Moved by Mr. W. H. Francis; seconded by Mr. L. L. Dillwyn,—

That the best thanks of this meeting be given to the chairman, Captain Evan Morgan, R.A., for his conduct therein. (Signed) GEO. GRANT FRANCIS, Sec.

THE PATENT OFFICE AND DESIGNS REGISTRY,

No. 210, STRAND, LONDON.

INVENTORS will receive (gratis), on application, the OFFICIAL CIRCULAR OF INFORMATION, detailing the eligible course for PROTECTION of INVENTIONS and DESIGNS, with Reduced Scale of Fees. 48

Messrs. F. W. CAMPIN and CO. offer their services, and the benefit of many years' experience, in SECURING PATENTS and REGISTRATIONS OF DESIGNS, with due regard to VALIDITY, economy, and dispatch—assisted by scientific men of repute.

Also, in MECHANICAL and ENGINEERING DRAWINGS, whether connected with Patents, Railways, or otherwise, by a staff of first-rate draftsmen.

Application personally, or by letter, to F. W. Campin and Co., No. 210, Strand (corner of Essex-street).

RAILWAY ALARM.—Capt. Fitzmaurice, of Ramsgate, has invented a very simple and effective railway alarm, which is now lying with Mr. Pulford, at the London-bridge station. It consists of an alarm-bell placed on the tender. This bell is kept silent by a piece of leather, on which it is pressed by an iron pin. This pin may be pulled out by drawing a string; and, when released by this means, the bell by a strong spring, is violently rung. The string passes loosely along the under edge of the roofs of the carriages on the outside; and, as it is not required to be kept tight, no more is necessary than to haul in the slack from any part of the train, and release the pin, when the alarm is given. This arrangement of a check-string was used some five years ago by Mr. Gregory and Mr. Pulford, on the Croydon line; but it was attached to the engine-whistle—an arrangement not always convenient. In this case, a separate bell is used, in which there is no inconvenience. We believe that a check-string of a similar kind is being applied at present by Mr. Williams, of Goswell-street, on the carriages he is constructing for the East Lancashire line. In this case, however, the string is to be attached to the locomotive steam-whistle, as in the old Croydon plan. Hitherto, arrangements of this kind have not been retained in practical use; because their expediency has been doubted. The demand of the public for something of the kind has, however, recalled the attention of engineers to the subject, and Capt. Fitzmaurice's seems one of the simplest that can be adopted.—*Railway Chronicle.*

TO PRESERVE WATER IN SEA CASKS AND CISTERNS.—Water may be preserved quite pure, either in long voyages, or in cisterns, by the addition of about 3 lbs. of black oxide of manganese powdered; stir it well together, and the water will lose any bad taste it may have acquired, and will keep for an indefinite length of time.—*Christian Almanac*, 1848.

STRONG MIXING PIG-IRON.—The YSTALYFERA

IRON COMPANY beg to solicit ORDERS for their ANTHRACITE PIG-IRON. This iron mixes well with Scotch pig—imparting to it strength and elasticity, and receiving from it a portion of its softness and fluidity. No. 3 Pig is recommended for mixing with soft iron—Nos. 1 and 2, for machinery castings, requiring great soundness and strength. At this period, when cast-iron is so much employed in the construction of bridges and other buildings, requiring all the strength and elasticity which the best mixture of metal will afford, it may be interesting to call attention to the characteristics of ANTHRACITE PIG-IRON, as REPORTED on by that great practical authority, the late DAVID MUSHET, Esq., M.I.C.E.:—

"It greatly exceeds, in *strength*, in *defective* powers, and capacity to resist *impact*, any iron at this time manufactured in the United Kingdom." 49

"It now only remains for me to mention a property peculiar to this iron, which was noticed at the time I made the trial experiments, four years ago, but which has been more fully developed in those more recently made. The property referred to is one of *great springiness*, or *elasticity*, which communicates a tendency to the bar, in deflecting and breaking, to resume its rectangular form. Bars that had obtained a permanent set of 2-10ths, when afterwards broken, presented but a slight deviation from a right line; and in no case, did the curvature exceed one-fourth of a tenth."

"It was also remarked, that most of the fractures, in breaking, presented a *regularity of grain* throughout, resembling the structure of *unhardened steel.*"

Address THE YSTALYFERA IRON COMPANY,

Dated June 22, 1847. *Near NEATH, SOUTH WALES.*

HOT-BLAST WITHOUT COAL, LABOUR, OR REPAIRS.

DIXON AND BUDD'S PATENTS.

Apply for particulars, or to inspect the process in operation on six blast-furnaces, to J. Palmer Budd, Esq., Ystalyfera Iron-Works, near Neath.

Dated June 22, 1847. 50

BIRMINGHAM AND OXFORD JUNCTION RAILWAY.

Notice is hereby given, that the next ORDINARY MEETING of the shareholders of the BIRMINGHAM AND OXFORD JUNCTION RAILWAY will be HELD at Dee's Royal Hotel, in Temple-row, Birmingham, on Saturday, the 19th day of February, 1848, at half-past Two o'clock in the afternoon.

The transfer books of the company will be closed from and after the 7th day of Feb. next, until after the day of the meeting.

Proxy papers, in order to be available, must bear a stamp of 2s. 6d., and must be received by the secretary 48 hours, at least, before the time appointed for the meeting.

P. H. MUNTZ, Chairman.

JOHN W. KIRSHAW, Secretary. 51

34, Bennett's-hill, Birmingham, Jan. 26, 1848.

BIRMINGHAM, WOLVERHAMPTON, AND DUDLEY

RAILWAY.—Notice is hereby given, that the next ORDINARY MEETING of the shareholders of the BIRMINGHAM, WOLVERHAMPTON, AND DUDLEY RAILWAY COMPANY will be HELD at Dee's Royal Hotel, in Temple row, Birmingham, on Saturday, the 19th day of February, 1848, at Twelve o'clock at noon.

The transfer books of the company will be closed from and after the 11th day of Feb. next, until after the day of the meeting.

Proxy papers, in order to be available, must bear a stamp of 2s. 6d., and must be received by the secretary 48 hours, at least, before the time appointed for the meeting. 52

WILLIAM MATHEWS, Chairman.

JOHN W. KIRSHAW, Secretary.

34, Bennett's-hill, Birmingham, Jan. 31, 1848.

CALEDONIAN RAILWAY—LOANS ON DEBENTURES.

The CALEDONIAN RAILWAY COMPANY are prepared to RECEIVE TENDERS OF LOANS ON DEBENTURES, in sums of not less than £500, for three or five years—bearing interest at the rate of 5 per cent. per annum, payable half-yearly, in Edinburgh, Glasgow, London, Liverpool, Manchester, or Bristol.

Tenders to be addressed to this office. Parties may also communicate personally with Messrs. Foster and Braithwaite, 68, Old Broad-street, London. 53

By order of the directors, D. RANKINE, Treasurer.

Caledonian Railway Office, 122, Princes-street, Edinburgh, March 26, 1847.

CALEDONIAN RAILWAY.—The HALF-YEARLY

GENERAL MEETING of shareholders of the CALEDONIAN RAILWAY COMPANY, will be HELD in Gibb's Royal Hotel, Edinburgh, on Friday, the 25th day of Feb., 1848, at One o'clock precisely, for the purpose of receiving a report from the directors, and on the general business of the company.

Immediately after the business of the company at such half-yearly meeting shall be over, a Special General Meeting of the said company will be held, at the same place, for the purpose—

1st. Of submitting to the proprietors, for their consideration and approval, the drafts of the following bills, introduced into Parliament in the present session—viz.:

A Bill to enable the Scottish Central Railway Company to lease their undertaking to the Caledonian, Lancaster, and Carlisle, and London and North-Western Railway Companies.

A Bill to effectuate the sale of the Wishaw and Coltness Railway to the Caledonian Railway Company.

A Bill to enable the Caledonian Railway Company to improve the Glasgow, Garnkirk, and Coatbridge, the Clydesdale Junction, and the Wishaw and Coltness Railways, and to make branch railways connecting the two last-named lines.

A Bill to enable the Caledonian Railway Company to extend their railway across the River Clyde, at Glasgow, and to form a station in that city.

2d. Of authorising the raising of a further sum of money on mortgage or bond, under the powers of the following Acts of Parliament—viz:—

"The Caledonian Railway (Glasgow, Garnkirk, and Coatbridge Branch) Act," 1846.

"The Caledonian Railway (Carlisle Deviation) Act," 1846. 54

"The Caledonian Railway (Glasgow Termini and Branches) Act," 1846.

"The Caledonian Railway (Clydesdale Junction Railway Deviations) Act," 1846.

And, 3d. Of considering a motion, of which special notice was given by Sir Andrew Agnew, Bart., at the general meeting of 31st August, 1847, "That no work be done on the Sabbath-day on this railway."

J. J. H. JOHNSTONE, Chairman.

J. W. CODDINGTON, Secretary.

The register of transfers will be closed from the 12th to the 25th February next, both days inclusive.

J. W. CODDINGTON, Secretary.

122, Princes-street, Edinburgh, Jan. 26, 1848.

MADRAS AND ARCOT RAILWAY COMPANY.—Notice

is hereby given, that the DEED OF SETTLEMENT will LIE for SIGNATURE at the COMPANY'S OFFICES until WEDNESDAY, the 9th inst. 55

2, Guildhall Chambers, Basinghall-street, Feb. 3, 1848.

SOUTH DEVON RAILWAY—CONTRACT FOR COALS.

—The directors of the SOUTH DEVON RAILWAY COMPANY are ready to RECEIVE TENDERS for the SUPPLY of TWO THOUSAND TONS of COAL, to be delivered within three months from the date of contract (in quantities of not less than 150 tons weekly)—one-half at Bridgewater, and the remainder at Totnes, Newton, Teignmouth, Starcross, Exeter, or Bridgewater.

Tenders to be addressed to the directors of the South Devon Railway Company, at the Railway Office, Totnes, on or before Monday, the 14th February, 1848.

Particulars may be had by application to W. CARR, Secretary. 56

Totnes, Jan. 28, 1848.

ATMOSPHERIC TRACTION—LAWES'S PATENT.—

A TRIAL of this SYSTEM will be MADE on the GRAND JUNCTION CANAL, by public subscription. The engineer contractor for the work will guarantee the result. Subscribers will be benefitted 20 times the amount of their subscriptions, and there is no doubt but that it will very soon be universally adopted on canals, as well as on railways. Drawings and descriptions of the plan, with full information, may be had, by post or otherwise, at 32, City-road, London.—A 20-horse power model works daily, from Twelve to One, Canal-bridge, Old Kent-road. 57

CLARKE AND VARLEY'S PATENT ELASTIC ATMOSPHERIC RAILWAY TUBE.

The PROPRIETORS are now prepared to GRANT LICENSES, or TREAT with RAILWAY COMPANIES and OWNERS of MINERAL, or other PRIVATE RAILWAYS, for the ADOPTION of the PATENT TUBE. 58

IMPORTANT IMPROVEMENTS have been recently effected in its CONSTRUCTION, and the proprietors have caused such experiments to be made on the working of the tube at Blackwall, by Mr. William Gravatt, in conjunction with their own engineer, as justify them in recommending this invention, with perfect confidence, to the notice of the public. It is one capable of removing the practical difficulties that have hitherto interfered with the success of the atmospheric principle; and they feel convinced, that, by its means, the superior advantages of this system of railway propulsion will be fully established.

The EXPERIMENTAL TUBE, which is 15 inches diameter, and above 300 ft. in length, may now be seen in operation every day, from One till Four o'clock, at the Poplar Station, on the London and Blackwall Railway.

Communications to be addressed to Mr. W. B. Hays, engineer to the proprietors, of whom any further information may be obtained, at their office, 31, Parliament-street, Westminster.—Feb. 5, 1848.

JOWETT'S PATENT HYDRAULIC TELEGRAPH.

OFFICES—No. 17, WELLINGTON-STREET, STRAND.

(Adjoining the *Morning Post* and *Court Journal*.)

PRELIMINARY ANNOUNCEMENT. 59

In the present important age of mechanical invention and advancement in the various branches of science, probably one of the most prominent production of fertile genius is that of instantaneous correspondence by telegraphic means upon railroads, no matter how far distant the transit. Telegraphic communication by electric machinery has already exhibited, upon numerous lines of locomotive traffic, the great advantages derived by the public through the medium of its powerful agency. But, successful as the telegraph mode of correspondence by electric aid may be considered, still greater and far more effective results will be secured to the public by Jowett's Patent Hydraulic Telegraph. The patentee, in the present limited detail, merely claims public attention to the following items in the way of superiority over the electric telegraph:—1. The economy in the construction of the hydraulic telegraph will be, at least, a saving of two-thirds, compared with the outlay required by the electric, independently of the considerable increase of speed, and the results far more decisive and distinct.—2. No expense whatever (after the first amount for construction) will be necessary to provide for the continuous working of the hydraulic telegraph, it being beyond the possibility of doubt that its action can be deranged, nor can any atmospheric changes interfere with, or affect, the success of its operations.—3. No physical impediment can compete with the laying down and the perpetual use of the hydraulic telegraph—neither height, depth, sinuosity, nor distance opposing in the slightest degree in perfect action. Detailed printed particulars are in preparation. In the meantime the patentee may be seen daily, from Eleven to Three, at the offices, 17, Wellington-street, Strand, where the models and plans are open to the inspection of the public.

TO RAILWAY ENGINEERS, CONTRACTORS, AND

OTHERS.—The ADVERTISER having obtained her Majesty's Letters Patent for an IRON TRUSS BRIDGE, peculiarly adapted, from its great strength and economy, for RAILROADS, is ready to TREAT with such companies, and other persons, as may feel disposed to adopt it. This bridge has been put up in Washington, and two of them (one of 70 feet span, weighing 13 tons) have been erected on the line of the New York and Harlem Railway; they are highly approved of by the directors, and several other companies have, in consequence, expressed their intention of adopting it.

A model can be seen, and further particulars given, either personally or by letter, on application to Mr. S. Moulton, care of the Editor of the *Mining Journal*, 26, Fleet-street. 60

IMPORTANT TO RAILWAY AND STEAM NAVIGATION

COMPANIES, MANUFACTURERS, AND ENGINEERS.

W. BROTHERTON AND CO.'S

PATENT LUBRICATING FLUID (or Animal Oil) FOR ALL DESCRIPTIONS OF MACHINERY. 61

W. B. & CO. have the pleasure to state, that the above article is extensively used in her Majesty's Steam Navy, and by several of the principal Steam Navigation and Railway Companies, and is pronounced by them, and by the first practical engineers of the day, to be far better adapted for the purposes of lubrication than any other article hitherto used for such purposes. The Patent Lubricating Fluid is equally applicable for the most intricate and fine pieces of machinery, as for the heaviest bearings of the steam-engine. It is cheaper, much more economical, and cleaner than oils at present in use; is free from smell, and calculated to effect a vast saving in the expenditure of working steam powers.

Further particulars can be had, and testimonials seen, by application to the manufacturers, W. BROTHERTON & CO., Hungerford Wharf, Strand, London.

N.B.—The above article will burn in lamps, and give a light equal to the best sperm oil.

LAMBERT'S PATENT FLEXIBLE DIAPHRAGM

WATER VALVES, or TAPS.—A certain PREVENTATIVE of LEAKAGE, superseding the use of the metal plug-tap, which is so continually out of order. They are more durable, less expensive, and being nearly frictionless, are opened and closed with perfect ease. They have been tested under various pressures, and have given the greatest satisfaction.—MANUFACTURED ONLY by the Patentees,

THOMAS LAMBERT & SON, Brass and Cock Founders, 62

30, New-cut, Blackfriars-road.

FLEXIBLE HOSE-PIPES FOR LOCOMOTIVE ENGINES,

RAILWAY CRANES, FIRE-ENGINES, GAS, &c.

PATENT VULCANISED INDIA-RUBBER HOSE-PIPES AND TUBING OF EVERY DESCRIPTION. 63

These pipes are made to stand hot-water without injury—are very superior to leather pipes, or the common India-rubber pipes; and, as they do not become hard or stiff in the lowest temperatures, or require any application when out of use, are particularly well adapted for fire-engines.

FLEXIBLE TUBING, of every description, for gas, chemical purposes, &c.

VULCANISED INDIA-RUBBER WASHERS, all sizes, for steam and hot-water joints, &c.—Sole manufacturer, JAMES LYNE HANCOCK,

Goswell Mews, Goswell-road, London.

TO ENGINEERS AND BOILER-MAKERS.

LAP-WELDED IRON TUBES, FOR MARINE AND

LOCOMOTIVE STEAM-BOILERS,

TUBES FOR STEAM, GAS, AND OTHER PURPOSES,

ALL SORTS OF GAS FITTINGS. 64

THE BIRMINGHAM PATENT IRON TUBE COMPANY,

42, CAMBRIDGE-STREET, BIRMINGHAM, & SMETHWICK, STAFFORDSHIRE, MANUFACTURE BOILER and GAS TUBES, under an exclusive License from Mr. R. Prosser, the patentee. These tubes are very extensively used in the boilers of marine and locomotive steam-engines in England and on the Continent—are stronger, lighter, cheaper, and more durable than brass or copper tubes, and are warranted not to open in the weld.

42, CAMBRIDGE-STREET, CRESCENT, BIRMINGHAM.

WORKS—SMETHWICK, STAFFORDSHIRE.

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LONDON AND PROVINCIAL DETECTIVE ASSOCIATION, FOR THE PROTECTION OF TRADE.

No. 39, SOUTHAMPTON-BUILDINGS, HOLBORN, LONDON. 65

OFFICE HOURS: TEN TO FOUR.

The object of this institution is to furnish every information (which may be obtained by subscribers only) respecting all parties, in any capacity whatever, avoiding their creditors, under any circumstances; also, in providing every species of information calculated to protect Bankers, Merchants, Tradesmen, Companies, Institutions, Assurance Offices, Loan Societies, Auctioneers, Landlords, Tenants, &c., in such a manner hitherto unattempted by any kindred society.

Subscribers may be preserved from losses through fraud of all kinds, by previous application at this office. They are also requested to make every communication in their power that may tend to protect the members, which will be considered strictly private, and, at the same time, deemed a favour.

Persons wishing to become members of this association, must apply, by letter only, addressed (pre-paid) to the secretary, who will forward the rules.

Subscribers only are eligible to apply for any information—the terms of which are £1 1s. per annum—10s. 6d. in advance. H. E. NEWMAN, Secretary.

NATIONAL DISINFECTED AND DRY MANURE COMPANY.

OFFICES—No. 7, BANK CHAMBERS, LOTHBURY.

[REGISTERED PROVISIONALLY.]

Capital £200,000, in 20,000 shares, of £10 each.—Deposit £1 per share.

No call will exceed 5s. per share, and the liability of shareholders will be limited to the amount of their respective shares.

PROVISIONAL COMMITTEE.

GERARD BARRY, M.D., Charles-street, St. James's-square. 66

JAMES ORGILL, Esq., Birmingham.

THOMAS BALDWIN, Esq., Birmingham.

JOSHUA E. COOPER, Esq., West Ham, Sussex.

The object of this company is to collect together the animal and vegetable refuse of large and populous towns, and subsequently to convert them into a dry, inodorous and portable manure.

By the company's process all decomposed substances, whether animal or vegetable, liquid or otherwise, may be rapidly converted into a scentless manure—rich in every fertilising quality, and abounding in vegetable stimulant.

A manure, somewhat similar, has for some time been manufactured by a prosperous company in Paris, under the commercial firm of "Baronnet and Co." Their last report states, that "crops were obtained incomparably finer, and more abundant, than by the use of any other manure.

The cost of preparation is trivial, in comparison with any of the present methods of dressing. The committee, therefore, have no hesitation in affirming, that the profits will realise the most sanguine expectations of shareholders.

The primary operations of the company will commence in the town of Birmingham. Samples of the manure may be seen at the offices.

An influential list of patrons and directors will shortly be advertised; meanwhile applications for shares, agencies, &c., may be addressed to

JAMES H. KENWORTHY, Secretary pro tem.

AGRICULTURIST CATTLE INSURANCE COMPANY,

8, CHATHAM-PLACE, BLACKFRIARS, LONDON.

(Registered under 7 and 8 Vic., cap. 110.)

Subscribed Capital—£250,000. 67

This company was established for the PROTECTION of FARMERS and AGRICULTURISTS, against LOSS BY DISEASE or ACCIDENT among their LIVE FARMING STOCK, in June, 1845; and, on the 31st December, 1847, had issued 20,000 agreements, and paid upwards of £100,000 for losses.

This being a PROPRIETARY COMPANY, with a *subscribed capital*, insurers incur no liability beyond the amount of their premiums, and are put to no additional expense.—*Three-fourths* of the insured amount is paid in case of loss.

LIFE INSURANCE DEPARTMENT.

Insurances on Lives are effected—*Annuities and Endowments* granted—and every branch of *Life Insurance* conducted on the *most liberal terms*. Farmers and Agriculturists will find this office *moderate* in its *rates*, and peculiarly adapted to their position and circumstances.

Annual Premiums for the Insurance of £100 on a Single Life.

Age next B. Day.	Whole of Life without Profits.	Whole of Life with Profits.	For the term of One Year.	For the term of Five Years.
15	£1 11 3	£1 13 7	£0 16 10	£0 18 8
20	1 15 0	1 17 8	1 1 3	1 2 5
25	1 19 10	2 2 10	1 4 0	1 4 8
30	2 5 7	2 9 1	1 5 9	1 6 4
40	3 0 7	3 5 4	1 9 10	1 11 4
50	4 4 7	4 11 4	2 1 6	2 5 7

Application for prospectuses, and every other information, may be made to

WILLIAM FENTON, Esq., Manager,

Or to the Local Agents.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY,

26, *CORNHILL, LONDON.*

Capital £500,000.—Empowered by Act of Parliament.

This institution embraces important and substantial advantages with respect to Life Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two-thirds of the premiums paid (see table); also the option of selecting benefits, and the conversion of his interests to most other conveniences or necessity.

Assurances for terms of years are granted on the lowest possible rates. 68

DIVISION OF PROFITS.

The remarkable success and increasing prosperity of the society has enabled the directors, at the last annual investigation, to declare a fourth bonus, varying from 38 to 85 per cent. on the premiums paid on each policy effected on the profit scale.

EXAMPLES.

Age	Sum.	Prem.	Year.	Bonus added.	Bonus in Cash.	Permanent reduction of Premium.	Assured may Borrow.
60	£1000	£0 3 4	1837	£217 15 1	£109 0 11	£16 0 4	£445 0 0
			1838	192 3 0	87 1 4	13 10 2	395 11 1
			1839	165 11 10	74 1 9	11 3 1	346 2 2
			1840	116 7 6	54 0 10	7 18 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

The division of profits is annual, and the next will be made in December of the present year.

F. FERGUSON CAMROUX, Secretary.

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*** It will at all times save much delay and inconvenience, if communications are directed simply

TO THE EDITOR,

Mining Journal Office,

26, FLEET-STREET, LONDON.

And POST-OFFICE ORDERS, &c., must be made payable to WILLIAM SALMON MANSELL, as acting for the proprietors.